41CM

JUL 5 1938

# THE LIBRARY QVARTERLY



VOLUME VIII · JULY 1938 · NUMBER 3
THE UNIVERSITY OF CHICAGO PRESS

### THE LIBRARY QUARTERLY

A Journal of Investigation and Discussion in the Field of Library Science

Established by The Graduate Library School of the University of Chicago with the Co-operation of The American Library Association, The Bibliographical Society of America, and The American Library Institute.

#### BOARD OF EDITORS

Managing Editor
WILLIAM M. RANDALL

Associate Editors

PIERCE BUTLER LEON CARNOVSKY CARLETON B. JOECKEL DOUGLAS WAPLES

Louis R. Wilson

WM. W. BISHOP, Librarian, University of Michigan Library, Ann Arbor ISAK COLLIJN, Director of the Royal Library, Stockholm

DONALD CONEY, Librarian, University of Texas, Austin

ARUNDELL J. K. ESDAILE, Secretary, British Museum, London

IGINO GIORDANI, Chief, Cataloging Department, Biblioteca Apostolica Vaticana, Rome J. C. M. Hanson, Professor Emeritus, Graduate Library School, University of Chicago

HARRIET E. Howe, School of Librarianship, University of Denver, Denver Hugo Krüss, General Director, Preussische Staatsbibliothek, Berlin

Henri Lemaftrae, Hon. Librarian, Bibliothèque Nationale, Paris

CARL H. MILAM, Secretary, American Library Association, Chicago

SYDNEY B. MITCHELL, Director, University of California School of Librarianship, Berkeley Helen G. Stewart, Public Library Commission of British Columbia, New Westminster

ADAM STROHM, Librarian of the Public Library, Detroit

HENRY B. VAN HOESEN, Librarian, Brown University Library, Providence Joseph L. Wheeler, Librarian, Enoch Pratt Free Library, Baltimore

CHARLES C. WILLIAMSON, Director of Libraries and Dean of the School of Library Service, Columbia University, New York City

P. L. WINDSOR, Librarian, University of Illinois Library, Urbana JAMES J. WYER, Director, New York State Library, Albany

The Library Quarterly was established by the Graduate Library School of the University of Chicago, with the assistance of the Carnegie Corporation, to fill the need suggested by a committee of the American Library Association for a journal of investigation and discussion in the field of librarianship. It is published in January, April, July, and October by the University of Chicago at the University Press, 5750 Ellis Avenue, Chicago, Illinois. The subscription price is \$5.00 per year; the price of single copies is \$1.50, with the exception of the April, 1934, issue which is \$2.00. Orders for service of less than a half-year will be charged at the single-copy rate. Postage is prepaid by the publishers on all orders from the United States, Mexico, Cuba, Puerto Rico, Panama Canal Zone, Republic of Panama, Dominican Republic, Canary Islands, El Salvador, Argentina, Bolivia, Brazil, Colombia, Chile, Costa Rica, Ecuador, Gautemala, Honduras, Nicaragua, Peru, Hayti, Uruguay, Paraguay, Hawaiian Islands, Philippine Islands, Guam, Samoan Islands, Balearic Islands, Spain, and Venezuela. Postage is charged extra as follows: for Canada and Newfoundland, 15 cents on annual subscriptions (total \$5.15), on single copies 6 cents (total \$1.54); for all other countries in the Postal Union, 25 cents on annual subscriptions (total \$5.25), on single copies 6 cents (total \$1.56). Patrons are requested to make all remittances payable to The University of Chicago Press in postal or express money orders or bank drafts.

The following are authorized agents:

For the British Empire, except North America, India, and Australasia: The Cambridge University Press, Fetter Lane, London E.C. 4, England. Prices of yearly subscriptions and of single copies may be had on application.

For Japan: The Maruzen Company, Ltd., Tokyo.

For China: The Commercial Press, Ltd., 211 Honan Road, Shanghai. Yearly subscriptions, \$5.00; single copies, \$1.50, with the exception of the April, 1934, issue which is \$2.00, or their equivalents in Chinese money. Postage extra on yearly subscriptions 25 cents, on single copies 6 cents.

Claims for missing numbers should be made within the month following the regular month of publication. The publishers expect to supply missing numbers free only when losses have been sustained in transit and when the reserve stock will permit.

Business correspondence should be addressed to The University of Chicago Press, Chicago, Ill.

Communications for the editors, manuscripts, and books for review should be addressed to the
Managing Editor, The Library Quarterly, Graduate Library School, University of Chicago, Chicago, Ill.

Applications for permission to quote from this journal should be addressed to The University of Chicago Press, and will be freely granted.

Entered as second-class matter January 2, 1931, at the post-office at Chicago, Illinois, under the Act of March 3, 1879. Acceptance for mailing at special rate of postage provided for in Section 1103, Act of February 28, 1925, authorized January 9, 1931.

PRINTED IN U-5-A

n of ary ia he p. ns, is lf. m in r, ne as al le y Le .



## THE LIBRARY QUARTERLY

| Vol. VIII        | CONTENTS FOR JULY 1938  | No. 3 |
|------------------|---|-------|
| THE POSSIBILI    | TY OF DISCARDING THE CARD CATALOG FREMONT RIDE  | R 329 |
|                  |   | 5 7   |
| PUBLIC LIBRA     | RY SERVICE IN THE MIDDLE WEST G. FLINT PURD   | Y 346 |
| ******           | LIBRARY AND THE DEVELOPMENT OF SECTIONAL S IN THE AMERICAN COLONIES - THOMAS E. KEY     |       |
| REPRINTS, COL    | UNTERFEITS, AND REPRODUCTIONS LESTER CONDI  | т 391 |
| AN APPRECIAT     | ION OF SIR EMERY WALKER GRETA LAGRO POTTE   | R 400 |
| THE CONTRIBU     | TORS TO THIS ISSUE  | - 415 |
| THE COVER DE     | SIGN  | - 416 |
| REVIEWS          |   |       |
| Karl Löffler and | Joachim Kirchner, Lexikon des gesamten Buchwesens                                       |       |
|                  | Pierce Butler   | R 418 |
| Guy Thomas Bu    | iswell, How adults read Spencer Shank   | 419   |
| Louis R. Wilson  | , ed., The role of the library in adult education Amy WINSLOW                           | 420   |
|                  | p., Subject index to readers - MILDRED P. HARRINGTON                                    |       |
| May Ingles and   | Anna McCague, Teaching the use of books and libraries                                   |       |
|                  | LULU RUTH REED  | 423   |
| Book Evaluation  | Committee of the Section for Library Work with Children                                 | 1     |
|                  | an Library Association, comp., Inexpensive books for boys and                           |       |
|                  | Esther Stallmann  | *     |
|                  | of the American Library Association, comp., Catalogers' and                             |       |
|                  | rbook, No. 5 Eliza Atkins   |       |
|                  | abject headings in education Susan Grey Akers   |       |
|                  | ubject catalogue of the Library of the Royal Empire Society, Vol.                       |       |
| -                |   | 13    |
|                  | ux, Publicity primer Guy R. Lyle umlet; the Second Quarto, 1604 Edwin Eliott Willoughby |       |
| -                | g, Shakespeare biography - Edwin Eliott Willoughby                                      |       |
| renx E. Schellin | g, onakespeare olography - EDWIN ELIGIT WILLOUGHBY                                      | 434   |

[Contents continued on following page]

| Charles Beecher                      | Hogan, | A bibl  | iograp | hy of  | Edw  | in A  |       |      |        |      | EHRS  | AM   | 400 |
|--------------------------------------|--------|---------|--------|--------|------|-------|-------|------|--------|------|-------|------|-----|
| Columbia Univer                      |        |         |        |        |      |       | stean | Coll | lectio | n on | the h | iis- |     |
| Herbert Brucker,<br>The general maga | The ch | hanging | Amer   | ican n | ewsp | paper | ST    | EPHE | ΝA.    | Mc   | CART  | HY   |     |
| America, publi.                      |        |         |        |        |      |       |       |      |        |      |       |      | 438 |
| BOOK NOTES                           | -      |         | -      | -      | -    | -     | -     | -    | -      | -    | -     | -    | 440 |
| BOOKS RECEIVE                        | D -    |         |        | _      | -    | -     | -     | -    | _      | -    | -     |      | 442 |

## THE LIBRARY QUARTERLY

Volume VIII

436

440

443

**JULY 1938** 

Number 3

## THE POSSIBILITY OF DISCARDING THE CARD CATALOG

FREMONT RIDER

WO years ago one of our national library bodies appointed a committee to consider the practicability of printing in book form the Library of Congress depository catalog. At a recent meeting a group of college librarians discussed the alternate possibility of printing in book form the complete L. C. union catalog. Obviously such a project, running not into mere thousands but hundreds of thousands of dollars, is not one to be undertaken nonchalantly. Under these circumstances the fact that the proposal was deemed worthy of serious discussion is, of itself, significant.

At first glance, nothing would seem to be more soundly entrenched in library practice than the card catalog. The very fact however that it seems so soundly entrenched should put us on our guard. For it is a truism of mechanical, as it is of biological evolution that it is exactly when an organism seems to have reached perfection that the seeds of its decay begin to germinate. Differentiation, development, gigantism, disappearance—these seem to constitute the inevitable sequentiae of all progress. That the card catalog has today reached the gigantic stage, few librarians would probably deny; that it has also reached the "gigantistic" stage is probable.

It is not, however, the purpose of this paper to prophesy the early doom of the card catalog, still less to propagandize for any specific successor device. Rather this is an attempt to summarize and correlate briefly a study of the whole problem of the handling of indefinitely cumulating records, based on some experience, over a number of years, in the printing and distribut-

ing, as well as the editing, of them.

In defense of the card catalog it must be said flatly and unequivocally at the outset that, whatever its defects, no other device at present exists which will do what it does: none, that is, which permits of that immediate and indefinite intercalation which is its distinguishing characteristic. In other words, no matter what devices we may consider for the reproduction of the card catalog, we never escape the card catalog itself. In every case it, in some form, is basic. One would be brash indeed to assert that some device which will entirely supersede the card catalog will never be invented; but the fact remains that none has yet been even intelligently forecast. We have, then, to deal with an almost impossibly awkward, bulky, costly, inefficient tool, for which, nevertheless, we have been completely balked in our efforts to find a substitute. There are substitutes: but always they are substitutes for copies of card catalogs. None of them will do what, at the beginning, only the card catalog can do. It is therefore with copies of the card catalog. and our need for them, that this paper will really deal.

The gravest single defect of the card catalog is that it is unitary. A card catalog might be described as a bibliography in an edition of one copy. If we want a second copy of it (for official use, let us say), or several copies of it (for public branch library use, or college departmental use), and we want that second copy to be also in card catalog form, the only way to get it is to make a second card catalog. And to do this we must duplicate most of the work of making the first copy. We do not, of course, have to do the cataloging again; but this paper concerns, not cataloging, but the material embodiment of cataloging. True, we may dexigraph or otherwise copy our cards mechanically, at some saving. But copy the cards individually we

must, and file them individually in card drawers we must. So long as our catalog remains in card form there is no way to escape the essential separateness that is inherent in cards, no way of multiplying copies cheaply and easily, as we may multiply copies of the lines in a printed book.

Although this primary defect of the card catalog is apparently irremediable, its other drawbacks do not, at first blush, seem quite so hopeless of correction. They are (1) continuous cost of

filing, (2) physical bulk, and (3) awkwardness in use.

That the maintenance of a growing card catalog involves astonishingly heavy, and constantly increasing filing cost is well understood by any library possessing a depository catalog. or having a catalog of its own approaching depository size. And the words "constantly increasing" need particular emphasis because in the early days of card catalogs it apparently was not realized that the cost of filing a card was not constant but would actually increase per card filed, as the catalog itself increased in size. Card filing has now become a serious item of library expense. According to our cost-accounting records at Weslevan, the filing of our depository catalog alone runs to over \$1,200 a year; in large libraries such costs, of course, amount to many thousands of dollars annually. This cost is particularly exasperating because much of the work, depository filing, for example, is constantly duplicated in scores of other libraries the country over.

But, although filing is an obvious problem, it is not an easily solved one. Some twelve years ago the possibility of using the Hollerith machine in certain library techniques was suggested. One such ingenious adaptation was described in an issue of the Library journal two years ago. However, the literature contains no discussion of one revolutionary possibility—that of alphabeting catalog cards mechanically by means of a mechanism of the Hollerith type. It may not be generally realized that the automatic alphabeting of catalog cards is even now theoretically possible. That means filing cards at the rate of three hundred a minute—so fast that they would fall into their proper alphabetic sequence in a continuous blur, instead of at the present

hand rate of two or three a minute! But, to say that the alphabeting of catalog cards mechanically by some adaptation of the Hollerith technique is possible is by no means to say that it is

immediately practicable.1

So far as relief from filing expense goes, we are as yet offered little practical aid. Shall we do any better when it comes to the alleviation of the physical bulk of the card catalog? It is clearly a fanciful overstatement to say that catalogs "will grow until there is no room for books," but those who have installations running into millions of cards know that their sheer bulk is a real problem. When this problem of bulk is resolved into its component parts, however, it is evident that the space occupied by card catalogs is a matter not so much of their own cubic contents as of their surface area in a crucial plane. In case of the card catalog this crucial plane is, of course, the vertical surface of the card drawers, for the principal space taken up by any card catalog is not that occupied by the catalog itself but that taken up by the aisles that give access to it.<sup>2</sup>

Our standard  $7\frac{1}{2} \times 12\frac{1}{2}$  cm. card was, undoubtedly, originally selected because it would hold sufficient single-spaced typewritten material to accommodate most catalog entries. "Type-

Escause the situation here is typical of that encountered in almost every phase of this card catalog problem, it may be worth listing a few of the more serious difficulties: (1) Provision would need to be made for punching with tiny holes all the cards to be filed. The pattern of these holes (by compressed air intervention) would govern the alphabetic filing of the cards. This would be a negligible expense if many cards could be punched at the same time—as with L.C. printed cards, for example—but a prohibitive expense if only a single card were punched at a time. (2) It would be necessary to change the size either of the Hollerith machines or of our present index cards. (3) Since the Hollerith machine provides only an 80-place distribution, such editing of our headings would be necessary as would insure that none were over eighty characters long. (4) Hollerith tolerances are, of necessity, exceedingly fine and would require a uniformity in the cutting of cards and in the thickness of card stock more exact than we are accustomed to in library practice. (5) It would be necessary to reserve a portion of every card for the punch holes, since, if sprinkled over the card, they interfere with the type matter. (6) Any form of mechanical filing necessitates the removing of all cards from their drawers at every filing, and running the entire card catalog through the machine, in itself no small labor, and one placing considerable wear upon the cards.

<sup>&</sup>lt;sup>a</sup> Mr. Metcalf comments that, in cases like the New York Public Library, where from one to two hundred persons may be consulting the card catalog at once, considerable floor space is needed to accommodate them, aside from that necessary to give access to the drawers.

written," you will note, not "printed": for printed cards, with their much greater compactness of matter, were not then envisaged. Today the situation has changed, for, thanks chiefly to the splendid work of the Library of Congress, a large proportion of all catalog cards are now printed. Not only that, but in the last twenty years typewriter type faces have been designed which permit a legible compactness of entry on cards almost equal to that afforded by printers' type. In other words, the reasons that were controlling when the 71 × 121 cm. catalog

card was established as a standard no longer obtain.

If Mr. Dewey and his confrères had ever dreamed of the Brobdignagian dimensions to which their embryonic card catalogs would attain in half a century, there is little doubt that they would have selected as standard some card smaller than 71 × 121 cm. Careful measurement of the actual type area of a number of L. C. catalog entries, or of the type superficies of average entries in the catalogs of the Library of the British Museum and the Bibliothèque nationale reveal that a card 6 × 9 cm., for example, provides all the space necessary for the average catalog entry. Such a small card is also almost as easily read and handled.3

The advantages of such a smaller card ramify in various directions. The cost of card stock would, per entry, be cut in half; and, in manufacturing large editions of cards, stock is by far the greatest single item of expense. Where cards are being printed, the smaller card cuts presswork costs in half because more cards can be printed at a time. Even in typewriting, card costs can be somewhat reduced by typing them gang-wise.

But we are now speaking particularly of storage costs. Here smaller cards effect tremendous savings; obviously from 70 per cent to 80 per cent more drawers may be put in a given aisle

<sup>3</sup> There is also a literally "half-sized" card-71 × 6 cm.-which is in wide commercial use. I have been using it very satisfactorily for several years in the editorial work of the American Genealogical Index committee. This has the advantage of having standard equipment regularly sold for it by the Library Bureau and other file manufacturers, and our existing  $7\frac{1}{2} \times 12\frac{1}{2}$  cm. files can also be easily adapted to it. This halfsize card files and handles easily, holds a surprising amount of matter, and saves onehalf in drawer space and card stock.

space. But that is not all. It is also possible to increase the length of the drawers. For drawer length is, of course, governed primarily by the weight of the cards in the drawer; and, if the size (and consequently the weight) of a given number of cards is cut in half, it becomes possible to double drawer lengths. Altogether, a half-size card would effect almost a fourfold reduc-

tion in storage space.

At this date even to suggest the possibility of a change in the accepted standard size of catalog cards sounds fantastic, and I am in no sense recommending it. But it certainly is one of the possibilities. Probably to the librarians of the seventies, with their catalogs full of the "blanket cards" which they had inherited from the incunabula days of card cataloging, the proposal to substitute for them a new, reduced, size  $7\frac{1}{2} \times 12\frac{1}{2}$  cm. card sounded just as fantastic. And we have today something they did not have in the seventies, namely, a photographic process by means of which all existing  $7\frac{1}{2} \times 12\frac{1}{2}$  cm. cards could be reduced, very quickly and at relatively slight cost, to any new proportionate size that seems desirable—if a new size seemed desirable.

Finally we come to the user's objection to the card catalog—and by "user" we mean the nonprofessional user, the general public. Few of us would deny, probably, that the public prefers book catalogs to card catalogs: that it is impatient, or even a bit afraid, of the latter. But suppose the public does prefer book catalogs. Can anything be done about it? Is there any possible way of arranging catalog cards that will permit of their easier use? In essence, we mean: is there any possible way to arrange a consecutive series of cards so that the faces of a considerable number can be seen at a glance? For what the public using the card catalog really wants is to see entries, many at once, as it sees similar entries on the page of a book; and to "turn" them, many at once, as it turns the pages of a book. It is this desire for "many at once" that makes most of the great European li-

 $<sup>^4</sup>$  It was not until 1935 that we finished the recataloging of the last of our old 5  $^{\prime\prime}$   $\times$  8  $^{\prime\prime}$  cards at Wesleyan!

braries cling tenaciously to some variant of the scrapbook,

pasted-entry catalog.

To this problem the various index visibles seemed at first to hold some hope of solution. But it became all too quickly apparent that the cost of equipping any large card catalog with "visible indexes," and the cost of filing into them afterward, would be prohibitive. The same objection applied to the so-called "Wheeldex" file, in which cards are ingeniously mounted and automatically "fanned out" on the periphery of a large revolvable wheel, and to a half dozen other less well-known devices which have been brought out in the last twenty years. Some of them are astonishingly ingenious; but none yet is really practical when it comes to large library card installations.

It may seem that all we are doing is raising straw men possibilities for the sake of knocking them down. But may not even this process give us a clearer understanding of our difficulties? This whole problem of making cumulative entries of any sort indefinitely and easily intercalatable, and at the same time easily viewable, is one of the most intriguing ones ever presented to the inventor; at first it looks so simple of solution; in

the end it turns out to be so completely baffling.

In the last few years we have been hearing much, and rightly, regarding the applicability of microphotography to bibliography. It is quite unnecessary to repeat that for their admirable pioneer work in this field we in the library profession are deeply indebted to Mr. Raney, Mr. Metcalf, Dr. Draeger, Dr. Tate, Dr. Bendikson, Mr. Rush, Professor Binkley, and a score of others. Their attitude toward this new method of textual reproduction has been throughout such a commendable blend of cautious restraint and contagious enthusiasm that it has gone far to convince the rest of us that it is quite within the bounds of possibility that in some as yet unforeseen microphotographic development may lie the happy solution for our whole problem of catalog recording.

Nevertheless, the greatest enthusiasts for microphotography will probably be the first to admit that it is not yet able to offer a complete solution and this for the same basic reason that the printed book cannot. Like the book, the record made by the photofilm is static—it does not easily admit further intercalation. Of course, intercalations may be made in a film by cutting and splicing it, just as, by analogy, intercalations may be made in a printed book by pasting in additional entries, or by tipping in additional interleaves. But both processes are plainly in the nature of subterfuges; for both are prohibitively expensive; and both, in practice, soon break down of their own physical complexity. The only really practicable way to intercalate new entries in a printed book is to reprint the book. And the only really practicable way to intercalate new entries in a series of catalog entries in film form is to make a new film.

On the other hand, no librarian needs to be told that the chief characteristic of microphotography today is the rapidity of its development, that any statement made about it on page 10 of an article will probably have to be corrected, or qualified, on page 20. So, immediately, it becomes necessary to counter to the objection just made (despite the fact that we termed it "basic") by admitting that intercalation in a microfilm catalog may be made entirely unnecessary by refilming the catalog anew. It is as though we said: "Burn that card catalog; it's cheaper to make a new one than to file a few additional cards into it!"

This fantastically revolutionary suggestion is not yet justified, although it may be soon. The cost crux of this particular phase of the microphotographic problem has not yet been explored, so far as I know. This crux isn't film cost, or processing cost—at least it isn't these if a film is used to its full capacity. For, technically, it is quite possible to put fifty thousand cards on one reel of film occupying only six cubic inches of space and costing only six dollars. The real difficulty is that there exists at present no mechanical device which will arrange fifty thousand cards into position for such a compact filming as that here suggested, and will then re-sort them back automatically into drawer order. For, if these two card-sorting operations must be done by hand—and I have experimented with a number of auxiliary

devices to help in the work—their costs are many times film

It may be replied in turn that raw film is so cheap that such compact filming is unnecessary: that such semiautomatic card-feeding as the Recordak offers is enough. And this may indeed be true if but a single film copy is wanted. But at some "edition" stage, film cost "crosses" handling cost. Again we face that most crucial factor of our whole catalog-copying problem: exactly how many copies of our catalog do we want? For, if we want an edition of one copy, a noncompact microfilm is almost surely our answer. But a ten-copy edition of our catalog may demand an entirely different technique; a hundred-copy edition probably quite another; a thousand-copy edition surely still another. This particular point—the correlation of reproductive process to edition size—is nowhere so clearly analyzed as by Professor Binkley in his recent Manual.

But microfilm catalogs have to surmount another hurdle, their fragility. The splendid experimental work done by the New York Public Library assures us, they say, that the public can be trusted not to abuse film. Perhaps. But handling films of occasionally used books, or even of newspapers, is quite different from handling the films of a catalog. Few not familiar at firsthand with the terrific punishment of constant use suffered by one of our great public library catalogs are able to realize how it literally wears out the toughest of cards.

To this objection we are, in turn, given two answers: first—the answer already discussed—that filming costs so little that a film catalog can be refilmed anew if it wears out; second, the ingenious answer offered by the Filmbook Corporation, viz., the film container. For any public catalog in film form, some form of a container, obviating any need of constant rethreading, would seem to be essential. Although this latter may be ques-

<sup>&</sup>lt;sup>5</sup> R. C. Binkley, Manual on methods of reproducing research materials; a survey made for the Joint Committee on Materials for Research of the Social Science Research Council and the American Council of Learned Societies (Ann Arbor, Mich.: Edward Bros., 1936)—a book, by the way, so comprehensive, so well "documented" with samples, in fact so altogether excellent, as to seem to me to deserve Andrea del Sarto's benison—"So such things should be!"

tioned, as a completely satisfactory solution, it is probably fair to say at least that to put a container in and out of a projector is no more of an obstructional technique than to pull a catalog drawer in and out and to admit, further, that the Filmbook people's fascinating stroboscopic indexing device is an actual improvement over guide cards. No one is more enthusiastic than I am over the ultimate possibilities of microphotography. If present difficulties are here mentioned, it is only to get them the sooner removed!

Granted then that, for a few-copy edition of a catalog, microphotography is, as the doctors would say, "indicated," the same is in no sense true for a multicopy edition. Here, it seems to me, we would do well, as librarians, at least, to consider again, but from an entirely fresh point of view, that embodiment in which all library catalogs started—namely, the book. Personally, I am inclined to feel—however much this may today sound like a sort of iconoclastic atavism—that the supposedly long outmoded book catalog offers very practical present possibilities. For one thing, it encounters, as has already been mentioned, less "sales resistance" from our catalog users. And, although the preferences of these "customers" of ours do not necessarily speak the final word, they should properly be given weight.

The rise and fall of the American printed library catalog is one of the most interesting of the unwritten chapters of the history of bibliography. Card catalogs received their first great impetus in the eighties. The linotype came into use in the same decade. All our great American library book catalogs, with their thousands of pages of fine print, came out before that and were set entirely by hand. None of these early printed catalogs cumulated; and the reason they did not cumulate was twofold: it was financially quite impracticable to buy and hold foundry type in such quantities as cumulation would have required; and it is tedious, and so almost impossibly expensive, to "cumulate" hand-set type matter. It is perhaps an idle speculation to consider "might have beens," but it is quite possible that, if Mergenthaler had succeeded ten years earlier in his efforts to

perfect the linotype, the public card catalog, as we now know it,

might never have come into being!

But, why, since linotype metal costs much less than foundry type, and linotype slugs can be cumulated alphabetically almost as fast as cards, do we have, nevertheless, not book, but card catalogs? One reason is that implied above—inertia—the fact that in the eighties and nineties the card catalog, as we colloquially put it, "got a head start." But there are other reasons. Why does the H. W. Wilson Company print the whole range of its invaluable indexes in 6-point type, instead of in an 8-point type which would be easier on the eyes? Not to save paper and binding, for these costs are relatively inconsequential in editions of the sizes in which bibliographies are issued. The controlling reason is that, because the superficial area of 8-point type matter is to the area of 6-point type matter as their squares, 8-point type matter requires almost twice as much linotype metal per word as 6-point. And, when we are dealing with type composition which has to be held, stored, and cumulated indefinitely, one of the largest items of cost is one seldom thought of, namely, the interest on the investment in, and the insurance, depreciation, and storage costs on the enormous tonnages of idle metal which all cumulative processing requires.

Also linotype metal is, and to cast properly must be, a relatively soft metal, so soft that, if it is printed from again and again, and particularly if it is "proved up" repeatedly, its face wears down rapidly to the point of worthlessness. So, though it is true that linotype slugs may be intercalated indefinitely, and intercalated almost as easily as cards may be, they cannot be printed from indefinitely. With the exception, therefore, of one special form—what we might call the "continuously cumulative" catalog—all printed catalogs force us to choose between the two horns of the same old, bad dilemma. We must either reset our entire catalog with each reprinting, at an almost prohibitive composition cost, or we must hold great tonnages of

<sup>&</sup>lt;sup>6</sup> This form of printed catalog seems to me to hold large possibilities, especially under certain special bibliographical conditions. It has never yet been tried anywhere. It should be.

composition metal permanently idle, at an almost equally pro-

hibitive holding cost.

Of recent years there has arisen a new printing technique which, if certain objections can be overcome, may prove the happy way out of these two hitherto unescapable alternatives. I refer, of course, to the photo-offset process, another application of photography to catalog making, in this case one used to make a book instead of a film. Photo-offset printing involves the printing of matter on paper by the photographing of an original. This original may be printed, handwritten, or typewritten, and it may be rephotographed repeatedly without depreciation. It is in this latter, and not sufficiently considered. fact that the peculiar applicability of photo-offset printing to cumulative bibliography lies. For we may type (or, if we prefer, we may typeset) an original copy (in our case, catalog entries); we may photograph that copy (or, in the case of typeset copy, a proof of it) on a sensitized plate; we may, by the interposition of a rubber blanket, print our book from that plate, and then discard the plate. And then later, when we desire to intercalate additions into our original copy, we may do it by means of tools no more complex than scissors and rubber cement; we may photograph the integrated result on a new sensitized plate and print a new book from that plate.

The extremely significant point, from our standpoint as catalogers, is that with this new reproductive medium we hold from one revision of our catalog to another (for the purpose of "cumulating" our catalog entries), not a cumbersome, space-consuming, money-eating tonnage of linotype metal, but simply a few thousand sheets of paper; and we "cumulate" our new entries into a new whole, not by handling metal slugs—an expensive technological process—but by handling paper slips—an inexpensive clerical process. It is true that the offset printing process is somewhat more expensive than the typographic printing process; but, when our other, and much more important, costs are taken into account, this difference in printing expense ceases to be material. All things considered, this new method, although it has never yet been tried, as far as I know, in

cumulated catalog work, seems to offer extremely interesting

Why, then, hasn't it been used for library catalogs? Offset printing itself is no novelty. Every librarian is daily receiving booksellers' catalogs so produced. The Publishers weekly tried it for a period last year for their "Books wanted" supplement. and then gave it up. The difficulty is that offset printing does not yet give really satisfactory results. Most booksellers' offset catalogs are sad looking affairs. They convey a certain amount of rather blurry, unattractive appearing information—that is about all that can be said for them. But is it really necessary that offset catalogs be blurred miniatures of sloppy typewriting? Is there any reason why they can't be made to look like real printed matter? The answer to this question is at once simple and complex: when one says that they can be, but haven't been, one says nothing new. It was pointed out at the microphotography symposium at Richmond that what offset printing urgently needs is a new copy-making machine, what might be called a "typographic typewriter." For, if we are dealing with hitherto unprinted materials, the original copy for our offset printing must be typewritten copy.7 We object to typewritten copy for our books, not because it has been produced on a typewriter, but because it looks as though it had been-which really isn't the same thing at all. What we, as book readers, want is offset typography that looks like letterpress typography, that is, compactly set type matter, with justified margins, an adequate variation in type faces, and clean presswork.

Now, rather curiously, it would not be at all impossible to design and construct a typewriter that will produce "copy" that will have, to all practical intents and purposes, the appearance of typeset matter. Even from the mechanical standpoint, it would not be very difficult to do it; although it would involve, of course, a number of material modifications of present type writers of the type-bar family.

<sup>7</sup> If we had to set new type copy, one of the main economies of the process would be lost.

First, there would have to be provision for a much greater number of characters. For instance, for any given face of type, at least five additional alphabets beside our present Roman caps and lower case, would be necessary, viz., upper and lower-case italics, upper and lower-case bold face, and small caps. All seven faces are essential because all normally occur on the printed page; and, without them, offset typography from a typewritten original cannot imitate the appearance of, or do the work of the printed page.

Second, provision must be made for such extra characters as brackets, cedillas, and asterisks, and particularly for the ligatures, fi, ffi, fl, ffl, etc., which are one of the subtle distinguishing

earmarks of the typeset page.

Third, there must be provision for removable "sorts" type bars, similar to the "sorts" matrices of the linotype, that will permit seldom used characters that cannot be given keyboard

recognition to be typed into the copy.

Fourth, if our "typographic typewriter" is to be adequate, it must provide for line justification, i.e., the typewritten lines must line up evenly at their righthand margins, as typeset lines do. Several devices, ranging from a crinkly, stretchable copy paper to a "variant-spacing" device recently put on the market by the Royal typewriter people, have been invented to solve this problem of justification. Some of them are ingenious; all interesting; none completely satisfactory.

Fifth, there must be better (i.e., blacker and more uniform) inking facilities than those afforded by the conventional type-writer ribbon; for offset, being a photographic process, can print letters no blacker or more clean cut than the letters of its copy. This requirement has been recently tolerably well met by a new carbon-paper ribbon, specially devised for offset copy use. (This paper ribbon can be used but once, and requires

special attachments.)

And finally, and by far the most important requirement of all, a proper typewriter for offset copy must provide variant widths for its letters, for it is the outstanding drawback of all present typewritten matter, from the standpoint of typographical appearance, that all of its letters, its m's and w's as well as its i's and l's, have the same "body" widths. The average font of foundry type is cast on some twenty different body widths. Twenty body widths aren't necessary. It is possible to design a typewriter face on three or four body widths, which so closely imitates the appearance of typeset matter as to deceive all but the expert. And three body widths of letter can be provided for on any typewriter without difficulty by means of an automatically variable space-escapement mechanism.

It will be asked at once, if such a typewriter as this is so badly needed—as unquestionably it is—and if it can be so easily constructed, why hasn't it been? That question is difficult to answer. Because this particular phase of the problem greatly interests me. I have in the last ten years repeatedly discussed it. by letter and in conference, with the sales or the patent departments, or both, of almost every large typewriter manufacturer in the country. Although, as has been said, the building of such a new "typographic typewriter" presents no insuperable technical difficulties, the typewriter manufacturers approached have uniformly professed lack of interest in the matter. Their attitude has been that the possible market for such a machine did not seem to them large enough to justify the experimental and tooling-up expense which would be involved. I have ventured to disagree with them. Indeed I prophesy that before long such a machine will be produced and will be placed on the market by someone: that, when it is produced, and is made practical, it will completely revolutionize many types of bookmaking and book publishing. A typographic type-typewriter of German origin was announced a few months ago. My efforts to procure one have so far been fruitless; but the samples of its work which have been shown in this country are not at all attractive. There, at present, this phase of our problem rests.8

<sup>&</sup>lt;sup>8</sup> Since writing the above, the International Business Machines Corporation have announced that they will soon place on the market such a new typewriter. In a letter received from them late in January they say: "The machine is now in process of development and is not yet in production. No price has been established." A footnote to this letter states that it "is written on the International Photo Offset Composing Machine." The letter shows no attempt at justification: otherwise it is an unprecedently successful typewritten imitation of typographic composition.

It must not be inferred, however, that such a new typographic typewriter as the one just forecast is essential to the application of offset printing to cataloging. It is quite possible even now to produce a cumulatively printed book catalog by means of a combination of our present typewriter and our present offset press. Further study of this phase of the subject, or, better yet, an actual trial of this type of cumulative catalog making by some venturesome library, should prove of the greatest value to the whole library world.

In summary, our choice between a card catalog and any other type of catalog is predicated on this: do we, in the specific situation involved, desire one copy, several, or many additional copies, of our catalog? If we really need only one copy, there is no question that, at present, one copy must be a card catalog because, as already stated, every catalog, no matter what it may later become, must start as a card catalog. But, if we consider the underlying question afresh, free from all prejudice of tradition or precedent, it will, I venture, develop that there are very few cases indeed in which a unitary catalog is completely satisfactory, and very many cases in which a multiple-copy catalog would be greatly desirable.

It is true that at present the average public library seems to get along with a single-copy catalog on cards. But how much broader and more efficient service it could give if its complete catalog were multiplied in printed form, so that copies could be located in each working department in the main building and in

each branch library?

The average university library likewise seems to manage at present with a single-copy card catalog. But how much broader and more efficient service it could give if its complete catalog were multiplied in printed form, so that copies could be kept in every separate college, departmental, and seminar library, and even in the private libraries of faculty members.

In the case of any large university, where the "library" is really a bewildering complex of libraries divided between scores of schools, departments, seminars, museums, and galleries, scattered perhaps not only over a city but over a state, the unifying and stimulating effect of a consolidated printed catalog, making all its library materials everywhere available, would, it seems to me, pay dividends, in inspiration and in scholarly service, far beyond its cost, heavy though that cost would necessarily be. (And this, to say nothing whatever of the inestimable value of the printed catalog of such a library to the rest of the world of scholarship.)

Finally this should be said: were our cataloging problem properly approached, the cost of printed catalogs would no longer be an insuperable obstacle. A genuine utilization of the advantages of regional co-operation would, in many cases, so much reduce total costs as to enable a common printed catalog to be produced for actually less than the independent card catalogs of the same libraries now cost. This would hold true for any fair-sized group of libraries, were that group one of type, of geographical propinquity, or both, if it should decide to make a thoroughgoing pooling of all its cataloging work.

But the qualifying word here is "thoroughgoing." Perhaps we are not yet ready for that.

#### PUBLIC LIBRARY SERVICE IN THE MIDDLE WEST<sup>1</sup>

G. FLINT PURDY

IBRARIANS have long recognized the prevalence of extreme inequality in library service among different areas. They have deplored a condition in which forty-five million Americans are without access to any sort of local public library, while other millions are but meagerly served. They are firmly convinced that greater equality in access to books is an end worthy of strenuous individual and collective effort. They believe that this end may be more conveniently and economically furthered through the medium of the public

library than by any other apparent means.

It is not the purpose of the present analysis to examine the validity of the convictions thus stated, although some evidence which bears upon their reasonableness will be presented. Nor is it assumed that the convictions are necessarily correct. The investigation upon which the present article is based represents an objective analysis of variations in public library facilities, support, and use among 622 counties of seven middle western states. Its purposes are: (1) to describe variations in public library resources and service among the 622 counties; (2) to ascertain some of the causes of the variations thus described and to measure their relative and combined importance: (3) to measure the degree to which public library development is spatially associated with the distribution of reading materials from other sources: (4) to measure the association between library development and the distribution of radios, telephones, automobiles, and the status of secondary education; and (5) to interpret in terms of their social and library implications the facts thus described. It is hoped that the considerations de-

<sup>&</sup>lt;sup>1</sup> Part of unpublished Doctor's thesis, Graduate Library School, University of Chicago, 1936.

fined may serve in some measure to clarify thinking with respect to the status of the public library in American society, to the end that future development may be more intelligent, better co-ordinated, and more effective. In the words of Isaiah Bowman:

We are not to suppose that measurement alone provides dependability in argument and conclusion. Unmeasurable conditions—many forms of commitment being intangible—are as often as not the decisive elements. However, a scientific treatment requires that we measure all the measurable things that are found important and thus attain progressively higher degrees of precision in handling the data of a problem, and expressing a meaning. We strive by measurement to reduce the number of variables in our thinking.<sup>2</sup>

#### THE MIDDLE WEST DEFINED

Woofter has defined a region as "an area within which the combination of environmental and demographic factors have created a homogeneity of economic and social structure." There is no doubt that the Middle West constitutes such a region, although there is little agreement among students of regionalism as to the exact area to which the name applies. Strictly speaking, its boundaries are zones rather than definite lines. In this study the area defined as the Middle West embraces the states of Illinois, Indiana, Iowa, Michigan, Minnesota, Ohio, and Wisconsin. The region thus delineated represents a compromise between social and economic homogeneity, areal unity, and political boundaries.

#### METHOD

After the scope of the analysis to be undertaken was defined and the area to be studied was fixed, the procedure was as follows:

First, the facts concerning (1) population served, (2) total expenditure, (3) volumes owned, (4) number of registrants, and (5) number of volumes loaned, for 1,441 free, tax-supported

<sup>&</sup>lt;sup>2</sup> Geography in relation to the social sciences (New York: Scribner's, 1934), p. 67.

<sup>&</sup>lt;sup>3</sup> National Resources Committee, Regional factors in national planning and development (Washington, 1935), p. 142.

public libraries in the seven middle western states were sum-

marized by county.

Second, the library data were converted into per capita or percentage figures, using the entire population of each county as the base. Thus (1) and (4) were expressed as per cents of the total population, while the other three factors were stated

in per capita terms.

Third, the status of each county with respect to each of the five factors representing library resources and service was expressed as an index number, in the form of the percentage which the given figure for the county was of the corresponding figure for the seven states considered as a unit. Thus, the per capita public library expenditure of each county was divided by and expressed as a percentage of the per capita public library expenditure of the region as a whole.<sup>4</sup>

Fourth, the five index numbers were combined in various ways in an attempt to secure a useful composite "index of library service." That finally accepted as reasonably satisfactory is a composite of four of the factors enumerated above (per cent

of population served being omitted).

Fifth, a study was made of the spatial association between public library development (as measured by the county compilation of library data) and the distribution of general magazines, farm journals, daily newspapers, weekly newspapers, radio receiving sets, residence telephones, passenger automobiles, school enrolment, urbanization, and wealth. For this purpose a sample of 154 counties was used, 22 selected at random from each state. This sample will be subsequently referred to as the "general" sample. The relative status of the various counties with respect to library development was compared with their status according to each of the other variables, by means of conventional techniques of statistical correlation.

Sixth, two samples of 100 counties each were selected for further study. One consisted of counties in which more than 50 per cent of the residents resided in incorporated places of 2,500 population or more in 1930. This group will be referred to

<sup>4</sup> See p. 350, for more complete explanation of the indices.

as the "urban" sample. The other consisted of counties in which less than 25 per cent of the population was urban. The latter will be called the "rural" sample. Each of these samples was used as the basis for a brief analysis of spatial association similar to that based on the general sample.

Finally, a summary and synthesis of the findings of the study was attempted with a view to pointing out their probable significance in relation to the future development of public library service in the region.

#### PUBLIC LIBRARIES IN THE MIDDLE WESTS

The 1,441 free, tax-supported libraries included in this study were distributed among the seven states as follows: Illinois, 274; Indiana, 222; Iowa, 179; Michigan, 196; Minnesota, 130; Ohio, 211; Wisconsin, 229. The approximate location of each city and town in which a public library was situated is shown in Figure 1. Forty-five counties, or 7.2 per cent of the 622 in the region, had no public library within their borders in 1933. Nine of the forty-five were in Illinois, one in Indiana, one in Iowa, ten in Michigan, thirteen in Minnesota, seven in Ohio, and four in Wisconsin.

Since some counties are more efficiently served by one library than are others by several, the number of public libraries in a given county, as shown in the figure, is of questionable significance. However, the distribution of dots is roughly indicative of the relative proximity of public libraries to the residents of different areas. Hence, the figure affords some indication of the relative accessibility of library materials.

<sup>&</sup>lt;sup>5</sup> The sources of the data analyzed in this section were as follows: Illinois State Library, Report of the Library Extension Division for January 1, 1932 to December 31, 1933 (Springfield, 1934); Indiana State Library, "Public library statistics for the year ending Dec. 31, 1933," Library occurrent, XI (1934), 195-99; lowa Library Commission, Seventeenth report of the Iowa Library Commission . . . . for the biennial period July 1, 1932 to June 30, 1934 (Des Moines, 1934); Michigan State Library, Satistics of public libraries, 1933-1934 (Lansing, 1935); Minnesota Department of Education, Library Division, "Statistics of public libraries, 1933," Library notes and news, XI (1934), 1-6; Wisconsin Free Library Commission, Twentieth biennial report—Public library statistics, 1934 (Madison, 1934). Data for the public libraries of Ohio were consulted in the State Library in Columbus. Population data are from the Fifteenth census of the United States: 1930.

The index of library service for each county is a composite, abstract figure based on the status of the county with respect to each of four factors: per capita expenditure, per capita volumes, per cent of population registered, and per capita circulation.



Fig. 1.-Public libraries of the Middle West, 1933

The nature of the index may perhaps best be explained by means of an illustration. Table 1 shows how the index for Black Hawk County, Iowa, was computed. Column 1 presents the status of Black Hawk County with respect to each of the four factors. It shows that in 1933 the public libraries of the county spent \$0.492 per county inhabitant, loaned 7.21 volumes per

capita, etc. Column 2 shows the status of the Middle West as a whole. In 1933 the public libraries of the region spent \$0.409 per inhabitant of the region, loaned 4.83 volumes per capita, etc. Each index in Column 3 is the quotient of the two corresponding figures in Columns 1 and 2. Thus the per capita expenditure of the libraries of Black Hawk County was 120.3 per cent of the per capita expenditure of the libraries of the entire region, etc. The index of library service for Black Hawk County (130.4) is the average of the four percentage figures thus derived. It is apparent that the index is purely "relative,"

TABLE 1
DERIVATION OF INDEX OF LIBRARY SERVICE

|                                   | 1                    | 2           | 3     |
|-----------------------------------|----------------------|-------------|-------|
| FACTORS CONSIDERED                | Black Hawk<br>County | Middle West | Index |
| Per capita expenditure*           | 49.20                | 40.90       | 120.3 |
| Volumes per capita                | 1.02                 | 0.91        | 112.3 |
| Per cent of population registered | 33.30                | 23.90       | 139.3 |
| Per capita circulation            | 7.21                 | 4.83        | 149.5 |
| Average (Index)                   |                      |             | 130.4 |

· In cents.

since it presents a composite picture of the relative status of the various counties with respect to public library support, resources, and use. The index has been justified empirically. As is true of the separate data which it combines, it does not necessarily provide a reliable basis for comparison of library service in individual areas. Within the region as a whole, however, the general pattern presented is reasonably representative of the relative status of public library service among the several counties.

The distribution of 616 counties according to their respective indices of library service is presented in Figure 2. The figure is read as follows: Of the 616 counties for which reasonably complete data were available, 49 had indices of less than 5; of the 49, 45 were entirely without public library service; 12 counties

had indices between 5 and 15; 24 between 15 and 25, etc. The index for the region as a whole was, of course, 100. The median or middle county of the 616 had an index of 66.5. Thus half of the 616 counties had indices smaller than 66.5. The "skew" of the figure, i.e., its divergence from symmetry, shows most

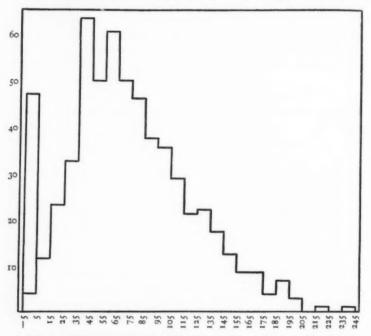


Fig. 2.—Distribution of 616 middle western counties according to their respective indices of library service, 1933.

of the counties in the lower half of the range and comparatively few in the upper half. That is, the status of most of the counties was low in comparison with that of a few. More concrete evidence of the extent of the disparity is afforded by consideration of some of the original data. Table 2 shows the median county of each state and of the whole region with respect to each of the five factors representing library service. It is evident that

the seven states vary widely in the degree of public library service which they maintain. Thus in per capita expenditure a range of from \$0.111 in the median county of Minnesota to \$0.207 in the median county of Indiana is shown. In circulation the range is from less than a volume and a half per capita in Minnesota to more than five volumes per inhabitant in Indiana. In half of the counties in the region less than 36.3 per cent of the population resided in library districts in 1933, less than \$0.18 per county inhabitant was spent for public library

TARLE 2 Public Library Service in Seven Middle Western States, 1933 (As represented by the median county of each state with respect to each factor)

| State     | Per Cent of<br>Population<br>Served | Per Capita<br>Expenditure<br>in Cents | Volumes<br>per 100 of<br>Population | Per Cent of<br>Population<br>Registered | Circulation<br>per 100 of<br>Population |
|-----------|-------------------------------------|---------------------------------------|-------------------------------------|---|---|
| Illinois  | 36.3                                | 19.8                                  | 62.8                                | 17.7                                    | 300.0                                   |
| Indiana   | 60.4                                | 29.7                                  | 113.1                               | 30.0                                    | 502.8                                   |
| lowa      | 28.4                                | 17.8                                  | 78.6                                | 16.2                                    | 294.4                                   |
| Michigan  | 39.3                                | 16.0                                  | 67.5                                | 17.0                                    | 263.9                                   |
| Minnesota | 20.5                                | 11.1                                  | 38.2                                | 12.1                                    | 144.5                                   |
| Ohio      | 38.1                                | 15.3                                  | 62.7                                | 18.1                                    | 228.I                                   |
| Wisconsin | 35.0                                | 21.4                                  | 76.4                                | 23.5                                    | 384.4                                   |
| Midwest   | 36.3                                | 17.9                                  | 72.8                                | 18.4                                    | 291.8                                   |

service, and less than three volumes per capita were loaned by public libraries. In only 45 counties, 7.2 per cent of the 622 in the region, did public library expenditures aggregate as much as \$0.50 per capita. The public libraries of approximately one-fourth of the counties in the region spent \$0.25 per capita or more. The libraries of a similar number of counties loaned as many as five volumes per inhabitant.

The approximate index of library service for each county in the Middle West is presented in Figure 3. Interpretations of this map must be made with caution. In counties having indices of less than 33.4, public library development is roughly less than one-third as great (quantitatively) as library development in the region as a whole. In the second group of counties, those having indices between 33.4 and 66.6, library development is

from one-third to two-thirds that of the region as a whole, etc. If an index of 100 were regarded as a very tentative standard, it would probably be fair to say that public library service was definitely inadequate in the counties which are white in Figure

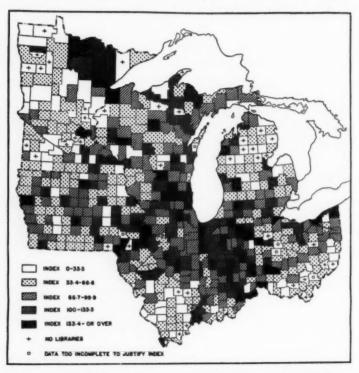


Fig. 3.—Index of library service of each county in seven middle western states, 1933.

3, that it was decidedly substandard in counties of the 33.4-66.6 group, and that only in the two highest groups did it compare favorably with that of the region as a whole. Clearly there is little semblance of equality in access to public library service among the counties of the Middle West. The next step in the

analysis is an examination of some of the possible causes of the disparity thus defined.

Of the many factors which have been suggested as probable causes of variation in library development, several are approximately constant among the counties of the Middle West, and hence not directly pertinent to the present study. In this category are such factors as topography, climate, race, and age distribution of the population. Other factors which have been suggested are not now amenable to quantitative analysis. It is the purpose of this section to "strive by measurement to reduce the number of variables in our thinking." Factors which lend themselves to quantitative treatment and which may be important in relation to public library development include: (1) economic ability, (2) urbanization, (3) the status of reading as a source of ideas and recreation, (4) the educational level of the population, (5) recent trends with respect to growth of population, and (6) nativity of the population. The extent to which each of the six factors tends to vary among the 622 counties, in relation to variations in library development, is indicated by the coefficients of correlation6 summarized in Table 3. It is assumed for the present purpose that the data presented are more or less representative of the factors enumerated above, in the same order.

The economic index is a composite figure based on (1) ratio of federal personal income tax returns to population (incomes of 1932),7 and (2) per capita retail sales, 1930.8 The two factors

<sup>6</sup> According to L. L. Thurstone, "The correlation coefficient is a pure number, a constant which indicates the degree of relation between two variables. It varies from +1 to −1. When the relation is perfect and positive, the correlation coefficient is +1. When the relation is perfect but inverse, the correlation coefficient is −1. When there is no relation whatever between the two variables, the coefficient is zero. Other values of the coefficient indicate intermediate degrees of relation." (The fundamentals of statistics [New York: Macmillan, 1935], p. 205.) For complete definitions and explanations of the statistical constants employed see Karl Holzinger, Statistical methods for students of education (New York: Ginn, 1928), pp. 141-89 and 256-316, and Mordecai Ezekiel, Methods of correlation analysis (New York: John Wiley, 1930).

<sup>7</sup> Income tax data from Rand McNally Commercial Atlas (66th ed.; New York: Rand McNally, 1934); population data from the Fifteenth census of the United States: 1930.

<sup>&</sup>lt;sup>8</sup> Retail sales data from U.S. Bureau of Foreign and Domestic Commerce (Department of Commerce), *General consumer market statistics* ("Domestic Commerce Series," No. 56; Washington, 1932).

were combined in the same way as that in which the four library factors were combined in computing the index of library service. The table is read as follows: The degree of linear association between the library index and the economic index is indicated by a Pearson product-moment coefficient of correlation of  $.733 \pm .038$ , etc. Each of the first five factors is significantly associated with library development. However, since the "causal" factors are undoubtedly interrelated, it is desirable that an attempt be made to ascertain the separate influence of each. Since an ex-

#### TABLE 3

# ZERO ORDER COEFFICIENTS OF CORRELATION REPRESENTING THE DEGREE OF ASSOCIATION BETWEEN THE LIBRARY INDEX AND SIX FACTORS OF POSSIBLE CAUSAL SIGNIFICANCE

|    | Factor Correlated with the Library                      | Coeffic | ient of |
|----|---|---------|---------|
| î. | Economic index  | +.733   | ± .038  |
| 2. | Per cent population rural farm†                         | 680     | ± .044  |
| 3. | Combined circulation of 1,927 daily newspapers          | +.567   | ± .055  |
| 4. | Per cent population 14-17 years of age in school, 1930† | + .442  | ±.065   |
| 5. | Per cent change in population 1920-30†                  | +.597   | ± .052  |
|    | Per cent native white of native parents†                |         | ± .081  |
|    |   |         |         |

<sup>\*</sup> Based on the general sample.

† Adapted from data reported in the Fifteenth census of the United States: 1930.

amination of Table 3 indicates that economic ability and urbanrural distribution (as measured by factors 1 and 2 of the table) are more closely associated with library development than any of the other factors enumerated, consideration of their relative and combined importance is in order. Table 4 presents a summary of some of the more important partial and multiple coefficients. The first partial coefficient (+.40) is an index representing the degree of relationship between library development and wealth (as measured by the economic index), in counties having the same percentage of their population rural farm. The second (-.183) is an index of the association between library development and the per cent of population which is rural farm in counties of similar economic ability. Among the

<sup>†</sup> Adapted from U.S. Bureau of Foreign and Domestic Commerce (Department of Commerce), Market data handbook of the United States ("Domestic Commerce Series," No. 30; Washington, 1929).

154 counties of the sample, it is apparent that library development is more closely (or more directly) associated with the economic index than with urbanization. The other two partial coefficients (+.538 and -.112) confirm this conclusion. Because of the size of the sample, the slight difference between the zero order coefficients, and the questionable degree to which the quantitative indices represent library development, wealth, and urbanization, the relative importance of the two causal factors as indicated in the table must be regarded as suggestive, not final. However, subsequent analysis tends to confirm the evidence of Table 4.

TABLE 4

Partial and Multiple Coefficients of Correlation Indicative of the Relative and Combined Influence of Urbanization and Wealth on Library Development\*

| Factors             | Correlated          | Factor Held Constant   | Partial r                    | R                 |
|---------------------|---------------------|--|------------------------------|-------------------|
| Library expenditure | Per cent rural farm | Per cent rural farm<br>Economic index<br>Per cent rural farm<br>Economic index | +.410<br>183<br>+.538<br>112 | ·74<br>·74<br>.80 |

\* Based on the general sample of 154 counties. A coefficient between +.158 and -.158 is less than twice its standard error.

The first multiple coefficient (.744) represents the degree of association between library development and the two causal factors combined. The square of the multiple coefficient indicates the approximate per cent of the variation in the library index which is associated with variations in the two causal variables. Thus (.744)² or approximately 55 per cent of the variation in the library index, is associated with variations in the economic index and the per cent of population which is rural farm. Similarly, 64 per cent of the variation in public library expenditure among the 154 counties is associated with variations in wealth and urbanization, as measured.

The coefficients of part correlation are worthy of somewhat more confidence than are the partial coefficients, since the former involve a less complete attempt to separate wealth and urbanization. Letting  $X_1$  represent the library index,  $X_2$  the economic index,  $X_3$  the per cent of population which is rural farm, the part coefficients representing the degree of association between the library index and wealth and urbanization, respectively, with the influence of the third factor upon the library index held constant are:  $_{12}r_3 = .632$  and  $_{13}r_2 = .320$ . The partial regression equation for predicting the library index from the economic index and per cent of population which is rural farm is:  $X_1 = 50.97 + .494X_2 - .518X_3 \pm 28.03$ . The beta coefficients are  $\beta_{12,3} = + .545$  and  $\beta_{13,2} = - .226$ .

A similar analysis based on the sample of 100 urban counties yields results almost identical with those reported above. In case of the rural sample, however, the zero order coefficients are too small to justify more refined analysis. Apparently wealth and urbanization are less significant in relation to library development in the rural counties of the region than in their urban neighbors or in the region as a whole. It is probable that the necessity of excluding counties with no public library service resulted in an artificial situation which would invalidate conclusions based on a correlation analysis of the rural sample.

Figure 4 presents the approximate status of each county in the region according to its economic index. Comparing Figure 4 with Figure 3 (the library index map), 97 counties (15.6 per cent of 622) are seen to vary two or more intervals. If only chance association operated, approximately half of the counties would vary at least two intervals. A similar comparison of Figure 4 with a map portraying library expenditure (not reproduced here) reveals a significantly different status with respect to the two factors in case of 53 counties, or 8.5 per cent of the total. A comparison of the library index and library expenditure maps with a map of urbanization shows that 105 and 108 counties, respectively, vary two or more intervals. It should be remembered in comparing the maps that their primary purpose is descriptive. Comparisons based upon them are admittedly crude, but nevertheless serve to illuminate the statistical constants describing the relationships.

The foregoing paragraphs have served only partially to clarify

the relative importance of wealth and urbanization as causes of variation in library development. There can be little doubt that urbanization is a potent factor, particularly when its total influence, direct and indirect, is considered. The statistical anal-

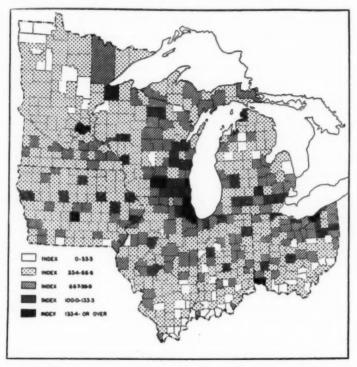


Fig. 4.—Economic status of each county in seven middle western states according to an index of economic ability.

vsis has suggested, however, that rural areas lack library service not primarily because of difficulties involved in establishing contacts between books and rural readers, but because the rural areas generally lack economic resources for the support of libraries. Other studies have shown that farm incomes average considerably lower than those of city dwellers, thus leaving a

smaller margin above a subsistence level for the purchase of "cultural things," including newspapers, magazines, and books, and for the support of schools, libraries, churches, etc.9

Thus far the analysis has considered the influence of only two of the causal factors enumerated on page 355. Second order partial coefficients representing the degree of association between the library index and the other causal factors, while wealth and urbanization are held constant, indicate no significant relationship between library development and percentage change in population, 1920–30, or between library service and nativity of population. Table 5 presents the statistical con-

PARTIAL CORRELATION CONSTANTS REPRESENTING THE RELATIVE AND COMBINED
INFLUENCE OF FOUR FACTORS UPON LIBRARY DEVELOPMENT

| Factor Correlated with Library Index                  | Factors Held<br>Constant* | Partial r | Part r | В     | R    |
|---|---------------------------|-----------|--------|-------|------|
| Economic index  | $X_1, X_4, X_5$           | +.401     | .653   | +.512 | .768 |
| Per cent of population rural farm                     | X2 X4 X5                  | 080       | .153   | 099   | .768 |
| Newspapers  | $X_{2}, X_{3}, X_{5}$     | +.191     | .254   | +.168 | .768 |
| Per cent of population, 14-17 years of age, in school | $X_{2}, X_{3}, X_{4}$     | +.147     | .175   | +.114 | .768 |

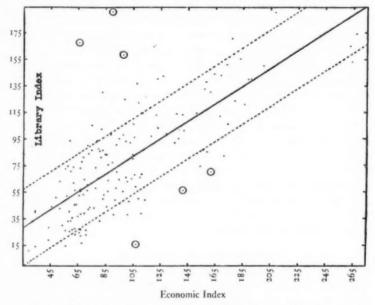
<sup>\*</sup>  $X_t$  = library index;  $X_t$  = economic index;  $X_t$  = per cent rural farm;  $X_t$  = ratio of daily newspapers to families;  $X_t$  = per cent of population, 14-17 years of age, in school.

stants indicating the relative and combined influence of the other four variables upon library development. The data of the table indicate that for the 154 counties of the general sample the library index is most closely associated with the economic index and least closely associated with the per cent of population which is rural farm. The two smallest partial coefficients are less than twice their standard errors. From the fact that  $R_{1.2345}^2 = .59$ , we conclude that approximately 59 per cent of the variation among the 154 counties in library development is associated with variations in the four causal factors. Since  $r_{12} = .733$  and  $r_{12}^2 = .537$ , it is clear that the factors measured by the economic index alone account for almost as much of the

<sup>9</sup> See J. H. Kolb and Edmund Brunner, A study of rural society, its organization and changes (Boston: Houghton Mifflin, 1935).

variation in the library index as do the factors measured by all four variables of Table 5. This fact is also shown by the similarity of  $S_{1.3445}$ , which is 26.8 and  $S_{1.3}$ , which is 28.5.

Figure 5 shows in graphic form the apparent influence of the factors measured by the economic index upon library development as measured by the library index. Each dot represents the



F16. 5.—Scattergram and regression line illustrating the association between the economic index and the library index.

status of one of the 154 counties of the general sample in library development compared with its status with respect to the economic index. Obviously, the counties which rank relatively high in economic ability tend to rank high in library development, while counties that rank low in wealth also rank low in library service. This relationship is represented in generalized graphic form by the solid line in the figure. The regression equation represented by the solid line is:  $X_1 = 11.983 + .6648X_2$ 

 $\pm$  28.5. The dotted lines are one S above and below the regression line. Their distance from the regression line indicates the extent to which the generalized empirical description conforms to the actual data, i.e., the reliability of predictions of the library index based on known values of the economic index.

The counties encircled in the figure were used as a basis for a study of the importance of other factors. It was concluded that the following factors appeared to be of possible causal significance in accounting for the extreme deviation of the six counties from the norm: (1) questionable validity of the economic index as applied to specific counties, (2) the presence of nonpublic libraries in the county, (3) sparsity of population, (4) the unit of library service, (5) the number of towns in the county, and (6) the educational status of the population.

Obviously many factors which condition library development in specific areas have not been examined. It has been the purpose of this analysis to "reduce the number of variables in our thinking," not to attempt an exhaustive enumeration and evaluation of all elements which affect variations in library service. Since approximately 60 per cent of the variation in the library index is accounted for, the analysis may be considered to have achieved its purpose.

#### DISTRIBUTION OF BOOKSTORES

The study so far has been concerned with the spatial distribution of public library facilities and service in the Middle West and with factors which appear to be partly responsible for the inequality described. Consideration of the distribution of nonlibrary phenomena which may conceivably supplement library service is now in order. Strictly speaking, the library is not a disseminator of ideas. It is one of many purveyors of print. Print, in turn, is one of many vehicles of ideas. In order to view the status of library service in perspective it is desirable that some consideration be given other agencies and media instrumental in the dissemination of ideas.

According to the American booktrade directory<sup>10</sup> there are ap10 New York: Bowker, 1935.

proximately 1,400 bookstores in 430 middle western cities and towns. Public libraries are found in more than three times as many towns as are bookstores. Exactly half of the counties of the region contain at least one book outlet, while 93 per cent



Fig. 6.-Towns having bookstores listed in the American booktrade directory, 1935

have at least one public library. Over two-thirds of the towns that have one or more bookstores are places of over 5,000 population. It is thus evident that the commercial book outlets are concentrated in urban areas. Figure 6 shows the approximate location of each town in which is located at least one of the bookstores listed in the *American booktrade directory*. Clearly the book marketing industry has devised no satisfactory system

of outlets for rural areas. A comparison of Figure 6 with the urban-rural data shows that the mean per cent of population which is rural farm for the 311 counties having book outlets is 33.7, and for those without bookstores, 51.6 per cent. The mean economic index of the 311 counties with book outlets is 73, compared with a mean of 47 for the counties without bookstores. Public libraries in the median county of the 311 having book-

TARLE 6

COEFFICIENTS OF CORRELATION INDICATING THE DEGREE OF ASSOCIATION
BETWEEN THE CIRCULATION OF PERIODICALS AND WEALTH,
URBANIZATION. AND LIBRARY DEVELOPMENT

| Class of Periodical          | Economic<br>Index | Per Cent<br>of Popula-<br>tion Rural<br>Farm | R*   | Library<br>Index | Library<br>Circulation |
|------------------------------|-------------------|--|------|------------------|------------------------|
| 15 general magazines†        | +.827             | 297  | .844 | +.684            | +.678                  |
| Curtis and Crowell magazines | +.440             | 274  | .471 | +.315            | +.299                  |
| Daily newspapers†            | +.548             | 600  | .606 | + . 567          | + .556                 |
| Weekly newspapers†           | 590               | +.689  | .690 | 551              | 573                    |
| Farm magazines§              | 627               | +.804  | .654 | 498              |                        |

Multiple coefficient representing the combined influence of wealth and urbanization upon the circulation of the periodicals.

† Ratio of circulation to families. Circulation data from U.S. Bureau of Foreign and Domestic Commerce, Market data kandbook of the United States.

merce, Markes data Randook of the United States.

\$ Ratio of combined circulation of Curtis and Crowell magazines to number of families. Circulation data from Crowell circulations, 1934 (New York: Crowell Publishing Co., 1934) and Sales opportunities, 1934-1935 (Philadelphia: Curtis Publishing Co., 1934). Families from the Fifteenth census of the United States: 1930.

§ Ratio of combined circulation of forty-two farm journals to families. Circulation data from Meredith Publishing Company, Circulation of farm publications, 1929 (Washington: Government Printing Office, 1920).

stores loaned 4.1 volumes per capita in 1933, while 2.2 volumes per inhabitant were loaned in the median county of those without bookstores. Obviously the same areas which are relatively lacking in public library service are correspondingly lacking in sources from which books may be conveniently purchased.

#### DISTRIBUTION OF PERIODICALS

Table 6 shows the degree to which the circulation of periodicals is associated with wealth, urbanization, the library index, and library circulation. It is apparent that the circulation of general periodicals tends to coincide with public library develop-

ment and service. Counties with relatively well-developed public libraries buy more general magazines and daily newspapers than do counties of lower library status. Weekly newspapers and farm journals, on the other hand, tend to supplement public library service, in a spatial sense. Further analysis of the relationships shows that most of the association between library development and the circulation of periodicals is due to variations in wealth and urbanization. That is, library development tends to coincide with the circulation of periodicals largely because both are functions of wealth and urbanization. When the economic index and per cent of population which is rural farm are held constant, the resulting second order partial coefficients are: + .158 between the library index and the 15 general magazines; + .048 between the library index and the Curtis and Crowell magazines; + .250 between the library index and the 1,927 daily newspapers; -.153 between the library index and the weekly newspapers; and +.064 between the 42 farm journals and the library index.

## NONREADING PHENOMENA INSTRUMENTAL IN THE DISSEMINATION OF IDEAS

A similar analysis of the distribution of four nonreading variables resulted in the data reported in Table 7. According to the first order coefficients, wealth appears to be significantly associated with the first three variables, while urbanization is associated with the last three. The distribution of radio receiving sets and of the percentage of population of high school age attending school tends to coincide with library development. There is a slight tendency for counties ranking high in library status to rank relatively high in ratio of residence telephones to families. No significant association appears to exist between library development and the distribution of passenger automobiles. The second order coefficients recorded in the final column of the table reveal significant relationship between library development and only one of the four nonreading variables (per cent of population 14-17 years of age, in school) in counties of similar wealth and urbanization.

#### SUMMARY AND CONCLUSIONS

Reading is one social medium of education and recreation. Books constitute one important means by which society preserves the intellectual heritage of the race and renders it available to contemporary and future generations. The public library is one social agency whose primary function is to make books available to society. This study has attempted to determine the

TABLE 7

Association between Four Nonreading Phenomena, the Economic Index, Urbanization, and the Library Index

|                                   | Economic Index          |                                       | PER CENT RUBAL<br>FARM |                               | LIBRARY INDEX         |  |
|-----------------------------------|-------------------------|---------------------------------------|------------------------|-------------------------------|-----------------------|--|
| Nonreading Variables              | Zero Order              | Per Cent<br>Rural<br>Farm<br>Constant | Zero Order             | Economic<br>Index<br>Constant | Zero Order            | Economic<br>Index and<br>Per Cent<br>Rural<br>Farm<br>Constant |
| Radios*                           | +.542<br>+.152<br>+.060 | + · 374<br>+ · 412<br>+ · 309         | 426<br>+.089<br>+.131  | +.056<br>+.396<br>+.329       | +.444<br>+.144<br>038 | +.097<br>+.133<br>068  |
| 14-17 years of age, in<br>school‡ |                         | +.009                                 | 454                    | 264                           | +.442                 | +.220  |

\* Ratio of radio receiving sets to families. Data from the Fifteenth census of the United States: 1930.

† Ratio to families. Data from U.S. Bureau of Foreign and Domestic Commerce (Department of Commerce), General consumer market statistics ("Domestic Commerce Series," No. 56; Washington, 1913).

Adapted from data reported in the Fifteenth census of the United States: 1930.

relative success of the public library in making books available to the inhabitants of 622 middle western counties, why it fails to dispense an equal degree of service in all the counties, whether or not certain nonlibrary agencies and media tend to supplement public library service in a spatial sense, and what factors appear to be pertinent in planning more equitable public library service.

The nature of the study thus defined has necessitated the use of data representing quantitative aspects of library service. The limitations of available records are evident to anyone who has attempted to use them. Evidence not presented in this article justified the conclusion that the existing library data, im-

perfect as they are, are more accurately representative of the relative development of public library service in different areas than is commonly assumed.11 The five indices of public library development and service were found to be highly consistent. Since all five told practically the same story, it seems reasonable to assume that the story must be an approximation of the actual relative status of the various counties with respect to library service, in so far as that service is measurable. The circulation data most closely approximate a composite index. In fact, correlation analyses based on the circulation figures yield results almost identical with those derived from similar analyses based on a composite index which combines four factors. This fact suggests that future studies making use of correlation techniques may well use circulation figures as a quantitative index of public library service, thus obviating the necessity of laborious computation.

The description of variations in library service among the counties of the region revealed a range from no service to complete coverage accompanied by service of a high type, judged by contemporary standards. The amount of service rendered in the majority of the counties is small in comparison with that rendered in a few areas.

Intercounty variations in public library development were compared with corresponding variations in fourteen nonlibrary factors assumed to be relevant. It was found, in general, that counties ranking relatively high with respect to library development ranked correspondingly high in wealth, radios, general magazines, daily newspapers, and "extent of popularization of education." There was some tendency for counties of high library status to have more residence telephones in proportion to families than counties of low library status. The former tended to be more urban than the latter. There were fewer bookstores in the latter than in the former. The comparatively

<sup>12</sup> G. F. Purdy, "Public Library Service in the Middle West" (unpublished Doctor's thesis, Graduate Library School, University of Chicago, 1936).

<sup>&</sup>lt;sup>13</sup> See G. N. Kefauver and James Rusk, "Variation in popularization of secondary education," School review, XLIII (1935), 112-18, for similar use of enrolment data.

poor, rural counties which ranked low in library development bought larger numbers of farm journals and weekly newspapers than did their wealthier urban neighbors. Table 8 summarizes some of the more important zero order coefficients of correlation indicating the degree of concomitant variation between the nonlibrary factors and the data representing public library development. The positive coefficient representing the association between the library index and the economic index indicates that

TABLE 8

COEFFICIENTS OF CORRELATION REPRESENTING THE DEGREE OF ASSOCIATION BETWEEN LIBRARY DEVELOPMENT AND ELEVEN NONLIBRARY VARIABLES

| Nonlibrary Variables                           | Library<br>Index | Library<br>Expenditure | Library<br>Circulation |
|--|------------------|------------------------|------------------------|
| Economic index                                 | + . 733          | +.797                  | +.728                  |
| Per cent of population rural farm              | 680              | 702                    | 688                    |
| 15 magazines                                   | +.684            | +.649                  | +.678                  |
| Curtis-Crowell magazines                       | +.315            | +.284                  | +.299                  |
| Daily newspapers                               | +.567            |                        | +.556                  |
| Weekly papers                                  | 551              |                        | 573                    |
| Farm journals                                  | 498              |                        | 518                    |
| Radios   | + .444           |                        | + .433                 |
| Telephones                                     | +.144            |                        | +.134                  |
| Per cent of population, 14-17 years of age, in |                  | 1                      |                        |
| school   | + .442           |                        | + .447                 |
| Automobiles                                    | 038              |                        | 055                    |

a relatively wealthy county usually has better developed library service than has a poorer county. The negative coefficient between the library index and the per cent of the population living on farms indicates that a county in which a large proportion of the population are farm dwellers tends to have less "adequate" library service than has a more urban county. The more nearly the coefficient approaches 1.0 or -1.0, the more accurately the generalized statement that one variable increases or decreases as the other increases applies, and the more nearly a given increase in one is accompanied by a regular change in the other.

It has been shown that in proportion to population, nearly

twice as many library books are loaned in counties which have bookstores as in counties without them.

The facts summarized above furnish evidence that the provision of the facilities for education and recreation which were considered tend to follow the same pattern. A county of low library status is usually also relatively lacking in general reading materials, radios, and telephones, and has a comparatively small proportion of its residents in the 14-17 year age group enrolled in school. These facts suggest that public library service is at least no less desirable in the areas now ranking low in library development than in those which rank high. If the equalization of opportunity to read is socially desirable in Cleveland, it seems reasonable to assume that it is equally desirable in Johnson County, Illinois. This assumption, however, necessitates two previous premises, namely, (1) that the equalization of reading opportunity is a legitimate social function, and (2) that the public library is the most effective and economical means of achieving that end. Obviously, the evidence examined in this study neither proves nor disproves these premises. The librarian, by the very nature of his position, accepts them as valid. A broad social consideration of the question, however, would necessitate an attempt to view the "place" and cost of public library service in perspective. Much study is needed before the librarian can avoid basing his philosophy upon unproved assumptions. The present study contributes toward an ultimate solution (1) evidence that other agencies of recreation and education do not, in general, supplement public library service among the counties of the Middle West, and (2) suggestions as to causal factors which must be considered in any plan proposing to render public library service more equitable.

The analysis of the relationships of selected quantitative factors to public library service confirms the importance of urbanization as a conditioner of "cultural" development, including the development of public libraries. It suggests, however, that urbanization is more important as a cause of variation in wealth than as a direct cause of inequality in library service.

The interrelations among the data examined suggest wealth

370

as the most important condition of community access to public library service. It is thus pertinent to ask how well the factor of wealth represents the total group of conditions, both measurable and unmeasurable, which may be expected to encourage communities to establish and support libraries. The data analyzed in the foregoing pages suggest that wealth is not only one of the most tangible and measurable of the conditions examined but a factor of major importance in itself. The values with which the American community, at least in the Middle West, is most concerned are largely associated with financial prosperity. Wealth is regarded not merely as a token of vocational success but as combining important benefits in social prestige. security, and opportunities for wider horizons—cultivation of the arts and the like. The services offered by the public library represent the latter type of use of money: the enrichment of personal and community life. Wealth is almost invariably first, cultivation after, although experience has shown that the principle is not immutable. Its application to services which society deems essential to the common good has been greatly modified. Formal education, being regarded as a matter of social concern. is subsidized by county, state, and federal governments; thus, in effect, wealth is confiscated from areas of greater economic ability for the support of schools in poorer communities. The same principle applied to the protection of health, the construction of highways, etc., has materially modified spatial inequalities in such facilities.

The growth of public library service under a traditional system of local autonomy has resulted in the wide disparity exemplified by the distribution of library facilities among the counties of the Middle West. This study has suggested the probability that any plan of equalization must aim at control of the principal causal factor which can be in some measure controlled, namely, inequality in wealth. The possibility of predicting library development from the economic index alone, within a relatively small error of estimate and nearly as accurately as from four factors combined, suggests the potential

value of economic data as a convenient and tangible basis for distributing subsidies.

The influence of wealth upon library service emphasizes the importance of adequate areas of support. Thousands of towns, townships, and even counties lack the wealth necessary to support effective library service. In many areas the unit could be adjusted to permit a workable balance between an adequate basis of support and a practicable area of service. In others no adjustment of local units can provide adequate support.

While wealth appears, in general, to be the most important direct condition of library development, it accounts for only a little more than half of the variation among the 622 counties in library service. There is need for studies of the influence of other factors, particularly of nonquantitative factors, under specific conditions. Undoubtedly, economic resources have been relatively unimportant in some counties, while historical and personal factors have played a vital part in many. In some communities topography is a primary consideration, in others, local government or politics. Legislation plays an important role, particularly in some states. Units of service are of vital importance in many areas—witness the influence of the town organization in New England and of the adoption of the county unit for library service in California and New Jersey. The availability of reading materials from other sources affects the need for public library service in specific localities. Clubs, churches, traditions, conventions, and leadership-all have been and will continue to be influential in determining the degree of library service maintained in given communities. Careful scrutiny of the action and interaction of these influences could hardly fail to yield much information of practical value to planners of future library development.

#### PROBLEMS SUGGESTED FOR FURTHER INVESTIGATION

Numerous questions, some of which are amenable to fruitful investigation, have been raised in the course of the study here summarized. Among those most closely related to this study, the following are perhaps worthy of enumeration:

1. The application of techniques of statistical correlation analysis to the local units of other relatively homogeneous regions is suggested. Probably no region is quite as well suited to county analysis as is the Middle West. No other equally homogeneous area combines reasonably complete quantitative records, a sufficient number of counties, and a minimum of counties entirely without public library service. For this reason the use of other units, particularly of library districts and municipalities, offers promise of more fruitful study in other regions. Similar analyses of samples, random and selected, of counties. library districts, and cities, from the country as a whole should vield valuable information. A similar study of counties served by county libraries would be useful in defining the factors associated with varying degrees of county library service and should yield highly important information on minimal population, economic, and other requirements of satisfactory county library service.

2. Careful and detailed historical studies, planned to define and evaluate the historical factors which have significantly influenced the development of library service in the country as a whole and in various states and regions, are needed.

3. Intensive case studies of selected communities, combining the historical approach with statistical and other techniques in an attempt to define factors of causation, are suggested.

4. Fundamental to an ultimate library philosophy which places public library service in its proper social relationships are studies of the status of reading as a social means of transmitting ideas, of providing recreation, and of promoting social stability. In the same category fall studies of the relative cost and effectiveness of supplying society with reading materials from different sources and by means of different agencies. There is definite need of more extensive and intensive study of the accessibility of reading materials in various areas and under different sets of conditions. Such studies may well approach the question from the point of view of the various sources and also from that of the reader. Intensive analyses of relatively limited areas combining the two points of view appear to offer particular promise.

## THE COLONIAL LIBRARY AND THE DEVELOP-MENT OF SECTIONAL DIFFERENCES IN THE AMERICAN COLONIES

THOMAS E. KEYS

IN THE Colonial era geographical barriers and differences in religion, nationality, and traditions helped to create three distinct groups in the American colonies. On the map these original thirteen colonies were divided as follows: New Hampshire, Massachusetts, Rhode Island, and Connecticut in the north; the beginnings of New York, New Jersey, and Pennsylvania, in the middle zone; and in the southern zone, Virginia, the Carolinas, Georgia, and the boundary states, Delaware and Maryland.

It is the purpose of this study to discuss the development of sectional differences as represented in the private and semi-private colonial libraries. Each group had its own personality, and the striking differences revealed in the libraries of the North and the South, for example, show the beginnings of the disastrous sectional cleavage which continued for the next hundred

vears.

Before the time of the American public library movement several private libraries existed in local communities. In New England the Puritan ministers, who often exerted their influence in managing the local governments, built up rather large libraries which in many ways reflected the Puritan complex. In the colonies of New York and Pennyslvania the libraries were likewise the acquisitions of the community leaders. A glance at surviving records shows that the owners not only included the ministers and the local political leaders but with the advent of the subscription libraries, the growing mercantile and professional classes also. Here the library contents reveal the growth of a genuine democratic spirit. The owners of the libra-

ries in the southern colonies were ministers, members of the professional classes, and, to a considerable extent, the landed aristocrats. Similarly, these libraries reflect the traditional culture of the southern gentleman, that of a transplanted loyal British subject. In considering the libraries of the various groups, only the more outstanding will be discussed individually, and the total book collection for each section will be reviewed.

Fifteen private libraries of the New England group are included in this study and, in order to suggest the quality of the individual collections, the libraries of the following persons will be reviewed: John Harvard, Increase and Cotton Mather, Michael Perry, and Bishop Berkeley's gift of books to Yale.

John Harvard (1607–38) sailed for New England in 1637 and was admitted as an inhabitant of Charlestown, Massachusetts, in August of that year. He served there as a teaching elder and college minister until his untimely death in 1638. He left his library of about 420 volumes, and approximately eight hundred pounds sterling to the new college at New Towne, for which generosity the general court reciprocated by naming the college Harvard. As may be expected, most of these books were theological and 133 of the 257 titles listed were in Latin. The principal texts in Latin were the works of Horace, Juvenal, Lucian, Persius, Plautus, and Terence. Among the Greek works were Aesop, Epictetus, and Isocrates. History was represented by fifteen titles; in the field of poetry there was a volume of Francis Quarles and one of George Wither.

Increase Mather (1639–1723), Puritan clergyman, politican, and author, had published more than twenty-five books by 1683. This ability to get things into print, together with his skill as a preacher, brought him recognition as the foremost divine of his time. His complete library, we are told, numbered close to three thousand volumes. Judged by it, alone, one notices the power of this Puritan theocrat. The Boston Public Library possesses a catalog of the books in the handwriting of

<sup>&</sup>lt;sup>1</sup> J. H. Tuttle, "The libraries of the Mathers," Proceedings of the American Antiquarian Society, n.s., XX (1911), 269-356.

Increase Mather. It is dated August 18, 1664, and lists 725 titles, about 30 per cent of which were in Latin. Classical literature numbered 21 titles, and history 72. Mather drew on the wisdom of the classics as well as the inspired word for the flavoring of his sermons.

Cotton Mather carried on his father's traditions of church leadership. His numerous publications, some 450 books and pamphlets, reveal him as an able historian and compiler, and his zeal for book collecting resulted in a library of some four thousand volumes.2 Although much of his library was dispersed, 840 fine titles remain. His numerous theological books suggest that he belonged to the old spiritual aristocracy of the seventeenth century. This meant a definite belief that the higher clergy were of the elect, and thus favored for ruling. It also meant an interpretation of the Bible as the final and complete revelation of God. Yet in Cotton Mather's library there is early evidence of definite toleration of other religious groups. Beside John Davenport's Power of Congregational churches asserted and vindicated we find Dissenters claim of right to a capacity for civil offices. The first proves that church members should alone be privileged to office holding; the second proves the case for dissenters. Other books in his library suggestive of the growing tendency of intellectual as well as religious toleration include Thomas Edward's Reasons against the independent government of particular congregations, Henry Hammond's A Defence of the Church of England, and Thomas Bradbury's Lawfulness of resisting tyrants.

The last New Englander of the seventeenth century whose inventory of books commands our attention is Michael Perry, bookseller. Perry's books recorded in his inventory were the stock of his trade at the time of his death in 1700. They numbered more than six thousand volumes, but those listed represented only 213 titles. His collection is significant in that it may be a guide to the reading of seventeenth-century New England. The Assembly's catechism, of which 428 copies were

<sup>&</sup>lt;sup>2</sup> T. G. Wright, Literary culture in early New England, 1620-1730 (New Haven: Yale University Press, 1920), p. 178.

listed, apparently was the most popular book. That the New Englanders were striving for home education is substantiated by the list of more than nine hundred primers. "Best sellers" included Willard's Men of war, Bunyan's The pilgrim's progress, Mather's Folly of sinning, Aesop's Fables, and George Sandys' translation of Ovid's Metamorphoses.

## BISHOP BERKELEY'S GIFT OF BOOKS TO YALE IN 1723

In the eighteenth century a change is noticed in the book collections of New England. This change is well exemplified in Bishop Berkeley's library, which he presented to Yale College in 1723. It consisted of nearly one thousand volumes represented by 390 titles of books and 110 titles of miscellaneous pamphlets. Theology made up 115 titles of the collection, literature 100, history 73, and philosophy 35 titles. There were not only the more famous Latin and Greek classics—Virgil, Ovid, Terence, Sophocles, and Phaedrus—but also the best of English contemporary literature. Included were Milton, Shakespeare, Spenser, Ben Jonson, and Samuel Butler.

#### THE COMPOSITE NEW ENGLAND BOOK COLLECTION

The composite picture of the quality of the books and the caliber of the owners of the more important private libraries of New England furnishes substantial proof of the domination of Puritan idealism (Table 1).

A preponderance of theological works is to be expected. To the Puritan this was not a man-made world, but a God-made one, and in his thinking he required a literal interpretation of the inspired word of God as reflected in the Old Testament. If it pleased God that he should write religious and political tracts, then from his pen flowed his interpretations of a devout and holy life. If these ideas conflicted with those of his neighbors, much controversial literature followed. It should be emphasized that the Puritan's guide to his divine reading was Calvin, and in Calvinism is found a concept of predestination, a doctrine which denied the freedom of the will and asserted the arbitrary division of mankind into the elect and the damned. The New

England Puritan's feeling of religious superiority conflicted harshly with that of the southern aristocrat and probably was the basis for the differences that were to submerge the American states several years later in bitter conflict.

The Puritan's interest in history was that of a loyal British subject. The Puritan movement was in its beginning a separation from the papal form of the Church of England. The New Englander held his allegiance to British custom and Brit-

TABLE 1
Composite Book Collection of the New England Colonies

| Type of Book    | Number of<br>Books<br>Owned | Per Cent of<br>Total<br>Collection |
|-----------------|-----------------------------|------------------------------------|
| Theology        | 4,859                       | 60                                 |
| History         | 916                         | 11                                 |
| Applied science | 521                         | 6                                  |
| Literature      | 408                         | 5                                  |
| Philosophy      | 396                         | 5                                  |
| Natural science | 262                         | 3                                  |
| Reference       | 223                         | 3                                  |
| School texts    | 153                         | 2                                  |
| Social          | 115                         | 1                                  |
| Unclassified    | 331                         | 4                                  |
| Total           | 8,184                       | 100                                |

ish law. We find then in the early libraries Gabriel Richardson's State of Europe, Richard Hakluyt's The principal navigations, Speed's History of the world, Jean Bodin's De la république, Raleigh's History of the world, and Richard Rawlinson's New method of studying history and geography. The few books in literature and philosophy recorded were not read for their interesting content but to provide, allegorically, the fulness of a devout life. Here again is a reflection of the Puritan's idea of salvation. He lived not for the present and he was not interested in the present except as it secured his future or gave him a chance for redemption in the world to come. The classics were used to flavor the sermons and probably were an unconscious influence in the development of literary style.

The question has been raised many times whether or not the libraries conformed in entirety to the Puritan religious dogmas. All Puritans were not Calvinistic; hence, it is not surprising to find that one of the oldest libraries, that of William Brewster, contained Bacon's Advancement of learning, which is surely the antithesis of Calvinism. It is likewise significant that the library included Jonson and Wither's Golden garland, for poetry was originally too flippant for the Puritan mind to tolerate. In the library of William Bradford was Jean Bodin's De la république. The possession of this book shows not only a keen interest in political philosophy but also an insight into the principles of democracy.

There is also some evidence that the Puritans read lighter prose. Samuel Sewall's diary records some trivial readings. A great reader himself, he appeared certain that his gifts of books would appeal to sundry widows. Accordingly, he presented to Madame Winthrop, Smoking flax inflamed, Vial of fears, and a Widow's book. Not prospering in this direction he read the Glance of heaven to Mrs. Mary Rock. To other widows he sent the Ornaments of Zion and Preston's Church marriage.<sup>3</sup> Although these were chiefly serious, they were the lighter read-

ings of the times.

It was not until the second quarter of the eighteenth century that a change in the book content of the New England private libraries is noted. At that time the activities of the booksellers and their advertisements in the colonial press helped create an interest in science and the arts; consequently, the content of the libraries changed. In political philosophy Harrington, Hobbes, and Locke were read. The writings and natural law of such men as Pufendorf, Montesquieu, and Voltaire appeared.

Prior to the Revolutionary period, the chief antagonists contended that there was a law, "a fundamental doctrine of natural right, which Parliament could not override." In proof of its

<sup>&</sup>lt;sup>3</sup> References to books from Lorenzo Sears, "Colonial libraries," The book lover, V (1904), 310, 317.

<sup>&</sup>lt;sup>4</sup>C. F. Mullet, Some political writings of James Otis ("University of Missouri Studies," IV, Nos. 3-4; Columbia: University of Missouri, 1929).

existence the writings of illustrious jurists, philsosphers, historians, and poets of more than twenty centuries were invoked. Aristotle, Cicero, Gratian, Machiavelli, Bodin, Coke and Seedon, Locke and Sidney, Robertson and Blackstone, besides authors already mentioned, appeared in the libraries to support this contention. There was, moreover, an advance in scientific thought. Bacon and Newton, the leaders of this movement toward original research and discovery of knowledge by observation and experiment, were at last being read by important colonial men.

The literary tastes of New England do not show a remarkable development. A collected edition of Shakespeare appears in the Harvard College Library catalog in 1723. The other dramatists of the Elizabethan period and the essayists of Queen Anne's time had not appeared as late as 1730. The change in literary reading habits was seemingly slow. In the latter part of the eighteenth century there were signs of development but the chill of the theological tracts and treatises extended into the nineteenth century. In Yale College, just before the Revolution, a group of students protested against the ancient classical and theological curriculum. They dedicated themselves to the cultivation of English literary studies, the direct outcome of which was the production of a new order of prose and verse by Dwight and Barlow, Trumbull and Hopkins. A new style was introduced into American writing, the inspiration of which is easily traced to the English classics which Berkeley had sent to Yale.

#### THE MIDDLE COLONIES

The New York mixture of cultures.—In 1664 Charles II granted all the territory between the Connecticut and Delaware rivers to his brother, the Duke of York. Prompted by the bitter commercial rivalry between Holland and England, the Duke of York dispatched a fleet to New Netherlands and seized the territory from the Dutch. This became an English possession (August 26, 1664), and the following year it was organized as a royal province. The early Dutch settlers were interested

primarily in economic success, and the few books recorded in their libraries give little evidence of literary culture. Printers and booksellers were also slow in coming to this colony. William Bradford established himself as the first printer in New York in 1693. The library records that have survived are those of influential Englishmen showing that Franklin's fear that foreigners would dominate the English culture in this country seems to have been groundless. The libraries that were comparable in size and scope with those of other sections were owned by John Sharpe, Alexander Innes, and Samuel Johnson.

John Sharpe sailed for Virginia in 1701 as an appointee of Thomas Bray for the Society for the Propagation of the Gospel in Foreign Parts. In 1704 he was appointed chaplain of the English forces in the province of New York. Sharpe felt that New York needed a public library and donated his library to the city of New York in 1713. His collection was similar to early New England collections in that a large proportion of the books were theological and in Latin. Striking titles included the popular Raleigh's *History of the world*, the comedies of Terence, and the works of Ovid.

Dr. Alexander Innes, of New Jersey and New York, seems to have been an important dignitary of the Church of England. A manuscript transcript<sup>5</sup> of a list of the books in his library reveals interesting clues concerning him: "Books sent by Lord Viscount Weymouth to Dr. Innes for his use during life provided he continues in the West Indies, at his death or removal to establish a library where he think convenient."

Dr. Innes left his collection in 1713 apparently to the Episcopal churches of New York and New Jersey. A glance at the manuscript mentioned shows the generosity of his benefactor, Lord Weymouth. The works of Bacon, Justinian's Institutes, Bodin's De la république, Pufendorf's De Jure, and Daniel's History of England offered the new world ideas to this clergyman.

Possibly the prestige of Columbia as a great world university is reflected in the library of its foremost president, Samuel

<sup>5</sup> In possession of New York Public Library.

Johnson, for the great educator had the library of a nobleman. English authors represented in his library were Stanley, Raleigh, Ogilby, Bacon, Dryden, Newton, Locke, Swift, Milton, and Prior. Classics numbered thirty-one; history, fifteen; and philosophy, eighteen, volumes. This was the best private library in New York.

The subscription libraries of colonial Pennsylvania.—Perfect freedom, both religious and civil, was the basis for the establishment of William Penn's colony. Although Pennsylvania is considered primarily a Quaker colony, religious freedom led to toleration of diverse religious bodies, including Calvinists, Lutherans, Catholics, Methodists, and several smaller, independent congregations. Civil toleration of the different nationalities, including the English, Germans, Swedes, and Dutch, was likewise remarkable.

The spirit of toleration and the harmony which resulted had a profound effect on the early libraries. Here we find the inception of an early democratic enterprise, the subscription library. This early pooling of library resources was an outgrowth of Quaker ideals. The subscription library was originated by America's foremost citizen, Benjamin Franklin. In 1727 Franklin founded the Junto, a debating society. Encouraged by Franklin, the members decided to establish a co-operative library, each member contributing a share of books which were to be kept in a separate room and circulated freely. Franklin soon felt that the benefits of such a library might be spread over a larger area and consequently proposed the formation of the Library Company of Philadelphia.

The first shipment of books was imported from a London bookshop in 1732; it consisted of thirty books in thirty-four volumes. The titles indicate the purpose of the library; they were well selected for browsing. Boerhaave's A new method of chemistry, Crousaz' A new treatise of the art of thinking, the Mathematical elements of natural philosophy, Pufendorf's Introduction to the history of Europe, and Stanley's Lives of the philosophers show the scholarly attitude of the Philadelphians.

The overwhelming success of the "mother of all subscription

libraries" becomes apparent in the 1764 catalog. By this time the collection included 1,072 distinct works. The growth of the collection followed a definite policy of expansion. History made up the bulk of the collection with five hundred tomes; philosophy is represented by eighty-five books; theology, by the major discussions of Puritans and Catholics—eighty-three books, English and American literature by seventy-five books.

Several other subscription libraries existed which conformed in scope, if not in size, to the Library Company of Philadelphia.

TABLE 2

Composite Book Collection of the Middle Colonies

| Type of Book    | Number of<br>Books<br>Owned | Per Cent of<br>Total<br>Collection |
|-----------------|-----------------------------|------------------------------------|
| History         | 861                         | 33                                 |
| Theology        | 623                         | 24                                 |
| Literature      | 347                         | 13                                 |
| Applied science | 227                         | 9                                  |
| Philosophy      | 165                         | 6                                  |
| Reference       | 121                         | 5                                  |
| Natural science | 112                         | 4                                  |
| Social          | 85                          | 3                                  |
| School texts    | 47                          | 2                                  |
| Unclassified    | 32                          | 1                                  |
| Total           | 2,620                       | 100                                |

Their chief characteristics are observed in the above collection: (1) The library exhibited an invasion into many fields of knowledge. Political theory was represented by Pufendorf, Voltaire, and Montesquieu; the novel included works of Swift, Richardson, Fielding, and Cervantes; the classics, the *Iliad* and the *Odyssey*; poetry and drama, Addison, Milton, and Shakespeare. (2) History made up the largest part of the collection, usurping the usual place of theology. This change is of the utmost importance. It suggests a desire to know more about the affairs of the world—more emphasis on the present world and less on the world to come. More fields of knowledge have ex-

erted their influence and this democratic change has led more men to share the joys of good reading. This change in reading habits consequently gave to Philadelphia the literary and political leadership of the American Revolution. As a center of literary activity it fostered political discussion, and the wealth of its libraries is in some measure responsible for the opinions of those men who chose Philadelphia for the first capital of the United States of America.

The total book collection of the middle colonies confirms in entirety the trend in the library content that has been suggested. Data from the eight libraries considered yield the results shown in Table 2.

#### THE PRIVATE LIBRARIES OF THE SOUTH

Three of the southern colonies have contributed much to the history of the American library. In Maryland parochial libraries were founded to strengthen the religion of the established church. In Virginia the Cavaliers and gentlemen accumulated important collections of books for their own enjoyment and self-education. In the eighteenth century, the immigrants to North Carolina brought their literary works as well as political and religious volumes.

Private libraries were more common in colonial Virginia than in the North. The first libraries, those owned by clergymen, were similar to the libraries of New England. Later the royalists, including the Cavaliers and the early gentlemen, many of whom had enjoyed university educations, brought to America the library tastes of the period. A loyal Briton, sending tobacco from his own wharf and receiving goods from London, was quite sure to direct the purchasing agent to send the new books that were the vogue. Another supply of books for the Virginia libraries was obtained from the sons of the southern gentry. Many of these young men were sent to the Continent for higher education. When they returned they brought their reading matter with them. The zeal for higher education was not

<sup>6</sup>W. D. Houlette, "Parish libraries and the work of the Reverend Thomas Bray," Library quarterly, IV (1934), 588-609.

limited to the Puritan. It is well to remember that plans were laid for the College of William and Mary in 1622, eight years before Winthrop and his followers came to Massachusetts Bay.

The spirit of free and generous hospitality for which the southern gentleman is so well known is reflected in the libraries. From their beginnings the Virginian libraries evidenced wholesome reading tastes. English classics and standard authors of the day predominated. The earliest libraries included some theological books also, chief among which were the sermons of Blair and Tilletson, and the Whole duty of man. With the decline of the Church in England there was a decrease in theo-

logical literature.

Of the ten private libraries in Virginia of which records have survived, the library of William Byrd was the most considerable. It illustrates in a remarkable manner the evolution of the private library in Virginia. The first William Byrd (1652-1704) came to America about 1670. As captain of the county militia and later auditor-receiver general of the colony, he was prominent in military and political affairs. He also served as a member of the committee for the erection of the College of William and Mary. During his life he accumulated considerable property and at his death was considered one of the richest men in Virginia. His illustrious son augmented to a considerable extent the Byrd library. He was educated in England and studied at Middle Temple. In 1692 he returned to Virginia, heir to a large estate, well educated and enjoying the friendship of prominent men both in England and America. He assumed a prominent position in the colony and had been in this country only a short time when he was elected to the House of Burgesses. In 1607 he was made receiver-general of the colony. In American history he is remembered as a commissioner who served to run the boundary line between Virginia and North Carolina (1728). The third William Byrd apparently took small interest in colonial affairs and probably was responsible for the family's financial difficulties which led to the sale of the Byrd library.

The original catalog of this library was bought by William McKenzie from a bookseller and bequeathed to the Library

Company of Philadelphia. The interesting advertisement appearing in *The Virginia Gazette* for December 19, 1777, adequately describes the library:

This Day is Published, A Catalogue of the valuable Library, the Property of the Estate of the late Hon. William Byrd, Esq; consisting of near 4,000 Volumes, in all Languages and Faculties, contained in twenty-three double Presses of black Walnut, and also a valuable Assortment of philosophical Instruments, and capital Engravings, the Whole in excellent Order. Great Part of the Books in elegant Bindings, and of the best Editions, and a considerable Number of them very Scarce. Catalogues may be seen at Messrs. Dixon & Hunter's in Williamsburg, and at most of the Book Sellers upon the Continent, and also at Westover, where the Library may be viewed, and the Executrix will treat with those who are inclined to purchase the Whole.

Of the 4,000 volumes in the Byrd library, 523 titles were in Latin and 230 in French. History claimed the largest number of titles, 458 (22.2 per cent). Classical literature was represented by 394 titles. There were 226 books of law, and 143 books on medicine. Adequate book-knowledge of medicinal treatment was intrusted to the plantation owner because of the small number of qualified doctors available. English literature claimed 176 books. This was, no doubt, the largest collection in the colonies. Here were to be found the works of Shakespeare, Spenser, Milton, Dryden, Pope, Defoe, and Suckling. Included in the field of foreign literature were Rabelais, Cervantes, Boccaccio, Descartes, and Machiavelli. Interesting to bibliophiles and art students were the drawings of Albrecht Dürer, Caxton's Recuyell of the historyes of Troye, and some of the printing of Aldus Manutius.

Private libraries in North Carolina.—Although books are mentioned in the archives of seventeenth-century North Carolina, no significant private libraries are itemized until the eight-eenth century. Dr. Stephen B. Weeks has explained this comparative lateness of their appearance. The first settlers were refugees from other colonies. Because their living depended on their labors, there was little time for books and reading. Beginning with the royal rule in 1728 the tide of immigration turned

<sup>&</sup>lt;sup>7</sup>S. B. Weeks, "Libraries and literature in North Carolina in the eighteenth century," Annual report of American Historical Association (1895), 171-267.

to North Carolina and by 1790 there were more than three hundred thousand residents in the colony. Within the period from 1728 to 1790 seven private libraries were outstanding. These were the libraries of Edward Moseley, Henry Snoad, Jeremiah Vail, John Eustace, David Milner, James Reid, and that of the Johnston family. The libraries of North Carolina were similar in character to those in Virginia and will not be reviewed individually.

TABLE 3

Composite Book Collection of the Colonies of the South

| Type of Book    | Number of<br>Books<br>Owned | Per Cent of<br>Total<br>Collection |
|-----------------|-----------------------------|------------------------------------|
| Applied science | 1,380                       | 24                                 |
| Literature      | 1,262                       | 22                                 |
| Theology        | 1,061                       | 19                                 |
| History         | 1,023                       | 18                                 |
| Reference       | 252                         | 5                                  |
| Social          | 187                         | 3                                  |
| School texts    | 176                         | 3                                  |
| Philosophy      | 101                         | 2                                  |
| Natural science | 80                          | 1                                  |
| Unclassified    | 167                         | 3                                  |
| Total           | 5,689                       | 100                                |

Composite picture of the libraries of the South.—As has been suggested, the archives of the southern colonies yielded the best data on private libraries. Ten libraries in Virginia, the Bray libraries of Maryland, and seven libraries in North Carolina comprised the data from which Table 3 was compiled.

The significant change in the southern library is in the emphasis placed on applied science. The growing professional classes, with their libraries on law and medicine, brought about this change. The emphasis on literature is also very marked. To their new country the Virginian and the North Carolinian brought a transplanted British culture which, although shared by comparatively few of the inhabitants, has survived to this

day. The characteristics of the southern gentleman conflicted harshly with those of the New England Puritan. The North and the South had little in common, as their libraries have testified. The divergent tendencies of these two antagonistic forces led to the bitter conflict of the Civil War.

In conclusion, the old library catalog and inventories are indicative of the intellectual interests of our colonial forefathers. As records of what people read, they reveal the material of American culture during the formative period of national life. Although some of the books that they used may seem to a modern mind uninteresting or even harmful, it must not be forgotten that they were significant of the institutions, ideas, and ideals of the period.

#### BIBLIOGRAPHY

Catalogs and inventories of individual libraries

## I. Libraries of New England

#### A. Plymouth

1. William Brewster

Massachusetts Historical Society, Proceedings, V (2d ser.; 1880-90), 27-81.

2. Myles Standish

The New-England historical and genealogical register, V (1851),

3. William Bradford

The Mayflower descendant, III (1901), 146-47.

4. Thomas Prince

The Mayflower descendant, III (1901), 208-9.

5. Samuel Lee

The library of the late Reverend and learned Mr. Samuel Lee . . . . (a catalogue). (Boston: Duncan Campbell, 1693). (Photostatic copy, Newberry Library.)

#### B. New Haven

1. Samuel Eaton

New Haven Colony Historical Society Papers, VI (1900), 309-13.

2. Bishop Berkeley's gift of books to Yale

Andrew Keough, "Bishop Berkeley's gift of books to Yale in 1733." Reprint from Saertykrar Overbibliotekar (Oslo: Wilhelm Munthe, 1933). Pp. 128-47.

#### C. Connecticut

John Winthrop, the Younger (1606-74)
 Special collection, Society Library of New York.

#### D. Massachusetts Bay

- I. John Harvard
  - T. G. Wright, Literary culture in early New England, 1620-1733 (New Haven: Yale University Press, 1920), pp. 265-72.
- 2. John Winthrop, the Elder (1587-1649)
  - R. C. Winthrop, Life and letters of John Winthrop, I (Boston: Ticknor, Fields, 1864-67), 478-79.
- 3. Increase Mather
  - J. H. Tuttle, "The libraries of the Mathers," American Antiquarian Society proceedings, n.s., XX (1910), 280-04.
- 4. Cotton Mather
  - J. H. Tuttle, "The libraries of the Mathers," American Antiquarian Society proceedings, n.s., XX (1910), 312-50.
- 5. Michael Perry
  - John Dutton, Letters written from New England, A.D. 1686 (Boston: Prince Society, 1867), Appendix B.
- 6. Thomas Prince
  - Prince Library, A catalogue of the collection of books . . . . of Thomas Prince (Boston: Boston Public Library, 1870).

#### II. Libraries of the Middle Colonies

#### A. New York

- 1. John Sharpe
  - Catalog in Collections of the New York Historical Society, XIII (1880), 350-62.
- 2. Alexander Innes
  - R. R. Hess, "Catalogue of Dr. Innes' books . . . ." (New York Public Library, unpublished Innes papers, 1713).
- 3. Samuel Johnson
  - Samuel Johnson, "A catalogue of my books . . . . 1726" (Columbia University Library, unpublished Johnson papers).

#### B. Pennsylvania

- 1. Library Company of Philadelphia
  - a) A catalogue of the Library Company of Philadelphia . . . . 1764. Philadelphia: Library Company of Philadelphia, 1764.
  - b) Albert Edmunds, "First books imported by America's first great library," Pennsylvania magazine of history and biography, XXX (1906), 300-308.

2. Iuliana Library Company

Charles Landis, "The Juliana Library in Lancaster County," Pennsylvania magazine of history and biography, XLIII (1919), 24-52, 161-81, 220-50.

3. The Newtown Library

George A. Jenks, "The Newtown Library," Collection of papers read before the Bucks County Historical Society, III (1910), 316-31.

4. The Loganian Library

Catalogue of books belonging to the Loganian Library . . . . Philadelphia: Loganian Library, 1795.

#### III Libraries of the South

A. Maryland

J. F. Hurst, "Parochial libraries of the colonial period," American Society of Church History, *Papers*, II (1890), 46-49.

- B. Virginia
  - 1. John Goodborne

R. G. Marsden, "A Virginian minister's library, 1635,"

American historical review, II (1905-6), 328-32.

2. Ralph Wormeley

William and Mary College quarterly historical magazine, II (1893-94), 169-74.

3. Richard Lee

William and Mary College quarterly historical magazine, II (1893-94), 247-50.

4. Edmund Berkelev

William and Mary College quarterly historical magazine, II (1893-94), 250.

c. Daniel McCarty

William and Mary College quarterly historical magazine, VIII (1899-1900), 19-20.

6. John Waller

William and Mary College quarterly historical magazine, VIII (1899-1900), 77-79.

7. John Herbert

William and Mary College quarterly historical magazine, III (1894-95), 145-48.

8. William Fleming

William and Mary College quarterly historical magazine, VI (1897-98), 150.

#### o. David Black

William and Mary College quarterly historical magazine, III (1804-95), 748-50.

#### 10. William Byrd

J. S. Bassett, ed., The writings of Colonel William Byrd of Westover in Virginia, Esq. (New York: Doubleday, Page, 1901), Appendix A.

#### C. North Carolina

#### 1. Edward Moselev

- a) W. L. Saunders, ed., The colonial records of North Carolina, II, 1717-28 (Raleigh: P. M. Hale, 1886-90), 583-84.
- b) J. B. Grimes, North Carolina wills and inventories . . . (Raleigh: Edwards & Braughton, 1912), pp. 317-18.

### 2. Henry Snoad

North Carolina wills and inventories . . . . (Raleigh: Edwards & Braughton, 1912), p. 559.

#### 3. Jeremiah Vail

North Carolina wills and inventories . . . . (Raleigh: Edwards & Braughton, 1912), pp. 562-64.

#### 4. John Eustace

North Carolina wills and inventories . . . . (Raleigh: Edwards & Braughton, 1912), pp. 490-92.

#### 5. David Milner

North Carolina wills and inventories . . . . (Raleigh: Edwards & Braughton, 1912), pp. 514-22.

#### 6. Tames Reid

North Carolina wills and inventories . . . . (Raleigh: Edwards & Braughton, 1912), pp. 537-41.

#### 7. Johnston family

S. B. Weeks, "Libraries and literature in North Carolina in the eighteenth century," American Historical Association, *Annual report for the year 1805*, pp. 169-77.

# REPRINTS, COUNTERFEITS, AND REPRODUCTIONS

LESTER CONDIT

ITH a press eager to enjoy all advantages of its freedom, with a public clamoring for more readable books, with libraries anxious to secure the utmost value for the minimum expenditure, some reprints, counterfeits, and reproductions have been in circulation since the invention of printing. The art of printing itself has been called a process of counterfeiting manuscripts, and photolithoprinting might be

termed a process of counterfeiting typography.

Perhaps many readers of this article have at some time possessed a reprint, a counterfeit, or a reproduction. During the 1933 World's Fair in Chicago reprints were sold of the Türkenkalender, the original of which is believed to be the first pamphlet printed from movable types. Many have had in their possession a copy of the Ulster County gazette for January 4, 1800, containing an account of the death of George Washington, and perhaps they still believe their copy to be genuine, notwithstanding the thorough and exhaustive researches of R. W. G. Vail, which have failed to result in the positive identification of any copy as original. Others may have received a document purporting to come from some New Deal agency, only to find later that its source is unofficial and its information pseudoofficial. If any readers have visited Mexico City, they have had opportunity to make most advantageous purchases of German pamphlet editions of American copyrighted books. Perhaps some have unknowingly purchased a copy of a "best seller" which has been surreptitiously reproduced by lithoprinting.

Bibliographers seem always to be centuries behind the coun-

<sup>&</sup>lt;sup>1</sup> R. W. G. Vail, "The Ulster County Gazette and its illegitimate offspring," Bulletin of the New York Public Library, XXXIV (1930), 207-38.

terfeiters, the plagiarists, the reprinters, and the reproducers. When we consider the exhaustive researches that were necessary<sup>2</sup> to inquire into the origin of certain nineteenth-century pamphlets, and the little effort that would have been required if these had been incunabula, we are moved to wonder why the bibliographical methods applied to incunabula cannot be applied to any class of printed or typewritten material. If they had been applied to incunabula at an earlier date, more complete information might have been secured for the reference tools which have been compiled, and there would be fewer bibliographical puzzles that defy solution. If the compilation of reference tools for bibliographical use in connection with early English imprints and Americana could be under way at this time, results might be achieved that would be much appreciated

by our survivors and descendants.

Catalogs exist for many classes of material. Covering incunabula we have the Gesamtkatalog der Wiegendrucke and the Hain-Copinger-Reichling catalogs. For early English imprints there is the Short title catalogue, and for Americana, the Bibliotheca Americana, begun by Joseph Sabin, and the American bibliography of Charles Evans. Occasionally we have cause to be very thankful to the catalogers and bibliographers of the past who have faithfully copied title-pages and other passages, who have endeavored to identify authors correctly, whose careful collations take due note of blank leaves. Frequently these details are indispensable to the identification of an incomplete copy of some early edition, and to the determination of any date that may be assignable. Sometimes many variant copies exist of a single edition. Especially is this true of early atlases. It would appear that the pages of text were printed and kept in storage. Sometimes pages were destroyed and replaced by reprinted or revised pages. The plates, also kept in storage, were revised from time to time and were put through the press as needed to fill orders. As an example we have the atlas of Claudius Ptolemy, printed in 1482 at Ulm by Lienhart Holle and reprinted in 1486 by his

<sup>&</sup>lt;sup>2</sup> John Carter and Graham Pollard, An enquiry into the nature of certain nineteenth century pamphlets (London: Constable, 1934).

successor, Johannes Reger. Some copies extant contain both original and reprinted sheets. In some editions of the *Civitates orbis terrarum*, maps are found of variant dates, extending well into the era of the Thirty Years' War. When variant impressions exist, and each impression is described by the compiler and collaborators of a catalog, there is occasionally some benefit to be derived by carefully comparing the title-page, the colophon, and the collation with available descriptions. Frequently, however, such efforts prove futile.

The designs and styles of the printing types have seldom been noted by compilers of bibliographical catalogs. Only in the Gesamtkatalog der Wiegendrucke has it been possible to give anything like adequate attention to typographical identification. But the editors of the Gesamtkatalog are unable to secure complete descriptions of all copies and must regard with skepticism some of the reports that they receive. Notwithstanding reports of G. J. Gussago and R. A. Peddie, the existence of a Brescian fifteenth-century edition of Buccardus' or Pylades' Genealogiae deorum was disbelieved, because copies of an edition found in the British Museum, in the Huntington Library, and elsewhere, were proved to belong to the sixteenth century. The Newberry copy, it was found, varied as to printing type, the type corresponding to that used as early as 1485 in Brescia by Angelus and Jacobus Britannicus.

There has been considerable debate over the relative merits of internal and external evidence. The attacks of Ernst Consentius<sup>5</sup> upon the Proctor-Haebler method appear to have enjoyed much wider publicity than has its able defense by Carl Wehmer.<sup>6</sup> Perhaps, even if American librarians were better acquainted with the researches of Robert Proctor, Konrad Haeb-

<sup>&</sup>lt;sup>3</sup> G. J. Gussago, Memorie storico-critiche sulla tipografia bresciana (Brescia: Bettoni, 1811); R. A. Peddie, Printing at Brescia in the fifteenth century (London: Williams and Norgate, 1905).

<sup>&</sup>lt;sup>4</sup> Lester Condit, A provisional index to Roman printing types of the fifteenth century (Chicago: University of Chicago Press, 1935), p. [vii], pl. II-III.

<sup>&</sup>lt;sup>5</sup> Ernst Consentius, Die Typen der Inkunabelreit (Berlin: W. de Gruyter, 1929).

<sup>&</sup>lt;sup>6</sup> Carl Wehmer, Zur Beurteilung des Methodenstreits in der Inkunabelkunde (Mainz: Sonderabdruck aus dem Gutenberg-Jahrbuch, 1933).

ler, and Victor Scholderer, they would be inclined to agree with Consentius and would consider typographical research as rather superfluous. We are indebted to Robert Proctor for a bibliographical classification of incunabula which has been adopted in several libraries as a classification scheme for incunabula on the shelves: for the assignment of numbers to each fifteenthcentury press and type that came to his attention; and for his attempts to identify the presses and types of incunabula without title-pages or colophons. We are indebted to Konrad Haebler for the classification and description of fifteenth-century Gothic types; for his attempts to classify and describe Roman types: for his attention to woodcut initials and other features. We are indebted to Victor Scholderer for augmented and more thorough descriptions, for his demonstration of the application of the Proctor-Haebler method through the British Museum Catalogue. We are further indebted to the Type Facsimile Society and the Gesellschaft für Typenkunde des XV. Jahrhunderts for their splendid reproductions of specimen pages illustrating fifteenth-century printing type designs. The writer's own researches have been designed merely to supplement these efforts with respect to Roman printing types.

It should be possible to classify, describe, and measure printing types found in all classes of printed material, especially in early English imprints and Americana. The principal styles of printing type are Gothic and Roman. If one follows the procedure of Konrad Haebler's Typenrepertorium der Wiegendrucke, 101 or more varieties will be found of the Gothic majuscule M, which is used as an index factor. Listed under each variety are printing types of more or less homogeneous design arranged according to the measurement of twenty lines. If use is made of the line counter devised by Captain Stanislas Millot, twenty lines can be counted and measured in less than five seconds. If the type is Roman, one may find the form of the letter Q a less satisfactory index factor than the measure-

<sup>&</sup>lt;sup>7</sup> Leipzig: Haupt, 1909-10.

<sup>&</sup>lt;sup>8</sup> Stanislas Millot, Nouvelles méthodes pour la description et l'identification des incunables (Paris: Droz, 1931).

ment of the outer mid-angle of the majuscule M. It may become desirable to use other angles of majuscules, notably N, V, A, and Z. To the geometrical eye this angular measurement of the majuscule M may be more apparent at a glance than the form of the letter Q, and the powers of observation may be readily verified by actual measurements, which may be made either with a templet, copyrighted by the late Colonel George Fabyan, or with an angle measure devised by Albert Sherman Osborn, author of *Questioned documents*. The magnifying glass or microscope are not needed, since the angle measurement serves merely as an index factor in grouping together printing types of similar or identical design.

Identity of type design does not in itself establish the authenticity of any copy. A lithographic or photolithographic reproduction may be distinguishable from an original copy through acquisition records, provenances, or other recorded data, or by a microscopical examination of the paper and ink under an ultra-violet ray. Sometimes even these are insufficient to detect the identity of a book or pamphlet as a reprint, counterfeit, or reproduction. Sometimes circumstances warrant further investigation. An interesting example is afforded by two variant copies of Quintilian's Institutiones oratoriae, both edited by Raphael Regius, printed by Bonetus Locatellus for Octavianus Scotus, and dated MCCCCLXCIII. Both variants are quite accurately described by Hain-Copinger 13652, Proctor 5045, and BMC.V.441. There is an obvious typographical error in the printing of the date, which may be interpreted as meaning 1493, without holding the publisher or printer responsible for any such interpretation.

In the Vollbehr copy at the Library of Congress, and in copies found at the University of Chicago, Northwestern University, and elsewhere, Q in the commentary type is separated from u.

<sup>9</sup> Riverbank Laboratories, The keys for deciphering the greatest work of Sir Francis Bacon (Geneva, Ill.: Riverbank Laboratories, 1916), chart in pocket.

<sup>10 2</sup>d ed., Albany, N.Y.: Boyd Printing Company, 1929.

According to Victor Scholderer,<sup>11</sup> the form of Q in the commentary type was changed about 1493, which would be the earliest possible date for the use of the commentary type at this stage. For the copy in the Wing collection at the Newberry Library, and the Brandegee copy at Harvard University, which contains commentary type having Q combined with u, 1493 would be the latest probable date. In the Newberry copy, sheet p2 reads as q2. In the Vollbehr copy, the quire enumeration of this sheet

TABLE 1
INITIALS IN TWO COPIES OF Institutiones oratoriae

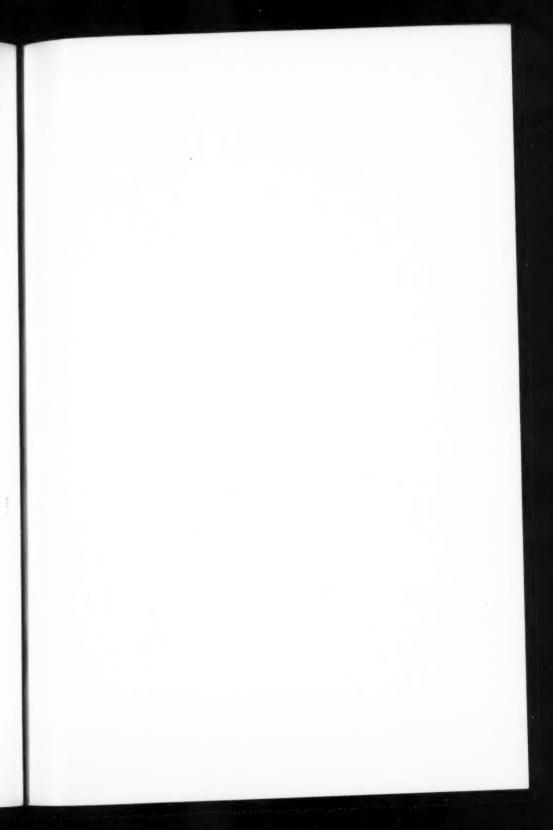
| Signature | INITIAL | LINES | PATTERNS                           |   |
|-----------|---------|-------|------------------------------------|---|
|           |         |       | Edition 1                          | Edition 2                                 |
| d 2 a     | Т       | 9     | Interlaced, white                  | Quadrifoliated                            |
| m 6 a     | Н       | 10    | Interlaced, white                  | Prismatic, vase with flowers              |
| q 5 a     | H       | 10    | Repeated                           | Repeated                                  |
| o 4 b     | D       | 10    | Interlaced, white                  | Interlaced, white vine, youth             |
| х з а     | S       | 6     | Two dolphins and rosettes          | Dog, duck, and lilies                     |
| & 6 a     | v       | 10    | Dolphins, rosettes,<br>and flowers | Interlaced, white vine                    |
| & 6 a     | V       | 6     | Flower-heads and<br>leaves         | Shanks separating three jovial companions |

reads correctly as p2. There are enough variations of page composition to make it most probable that the two variants are separate and distinct editions. Can it be that both were printed in 1493, and that both are authentic and genuine?

The woodcut initials of the two editions are frequently, but not always, identical. Designating these variant copies as Editions I and 2 the variations are noted in Table I.

Some of the variant initial patterns of Edition 2 cannot be found in other available imprints from the press of Bonetus Locatellus dated between 1490 and 1497, when these Roman print-

<sup>&</sup>quot;British Museum, Catalogue of books printed in the XVth century now in the British Museum, V (London, printed by order of the trustees 1908-), 435.



Duodecimus



Entú est ad pté opis destinati loge granissimame. Cuius equidé onus si tâtú opinioe prima cocipere potussicial autorius columbie quato me premi serés sentio: maturius columbis quies mess. Sed initio pudor omitated qui pmiser atenuitemox qq psingulas quoques babor crescerette pere quam effecta crate poes dissilicultates aio me sus setuius quoques sicce maiori quoque preman tamé pospicien siné minicoltitutu é uel desicere potus que sir est estatus qui mole preman tamé pospicien siné minicoltitutu é uel desicere potus que sir est estatus minicoltitutus qui se cepanus, mox

mehraura folicitate puecti logiusedu tatu nota illa & plenfea ariu feripto nbustractata præcipimus:nec adhuc a littof peul uidebamur. & multos cica uelut iifdé fe uétis credere aufos habebamus. Ja cu eloquédi rône no mlime repta paucifimifq; téptată igrefii fumus: ratis qi iă peul a portu re dilitet rapiebat. Poftq ucro nobis ille:que îltituebamus:orator a dicendi magiltris dimillus:aut fuo iă îpetu fere :aut maiora fibi auxilia ex ipfis fapitat penetralibus peuis qi alut fimus ablatisfetire cerpimus. Nuc calum midiq & undiq: potus. Vinu moi illa imefa uastitate cerner uidemur. M. Tulliusq tame i ple quis tâta atq; ita istructa naue hoc mare îgrefius:cotra hiuelaishiberq: remossă de ipfo demu genere dicendiquo fit ufurus ple quabit officia:ita nec âtecedete cofeq poslumus: & logius cudu é. Vt res femt pabalis tame cupiditas honestoș: & tutioris audacia e teptare: qbus musiciorucnia é.

No posle oratorem nist uirum bonu esfe.

Itergo nobis orator: que istituimus: is q a.M. Catoe finit: uir bonus dicedi pitus uen id ad ille poluit prius: & ipfa natura potius ac ma nis eft utiquir bonusid no co tatuiqd fi uis illa dicedi malitia iftru mienihil fit publicis privatifq rebus pniciofius cloquetia: nofq ipfi q p mili pre coferre aligd ad facultate dicedi coati fumus:peffime mercamur derebus humanis: si latroni coparemus hac arma.nomiliti. Quid de no. biloquor! Remipfa natura in co quo pracipue idulfile homini uidetur quoq nos a cateris ajalibus feparal le:no pares: fed noucrea fuerit: fi facul me dicedi focia sceleru, aduersa inocentia hoste ucritatis inuenit. Mutos ainaki & egere omni röne latius futllet q puidetiæ munera i mutuå pni octouertere. Logius tedit hoc iudiciű meű. Neg: eni tátú id dicoæű qui lit trator:uiru bonu re oportere: sed ne futuse que oratore nisi uis: bonu. Na ane necitelligetia cocefferis iisiq ppolita honeltore acturpiù uia peiore legmalut neg: prudetia:cu grauitlimas frequenter legu: fempuero malæ cocentia parias a femeriplis iprouifores; exitu iduant. Q uod fi nemiremalum elle nifi stultu eude non modo a sapientibus dicitur: sed uulgo quoquempé creditineerte non het unqua stultus orator. Adde que stuoquide operis pulcherrimi uacare mens nifi omnibus uitiis libera po-M. Primum qui codem pretore nullum est honestoru turpiumq; cofor Es cogitare optima fimul & deterrima no magiseft unius animi: q eiul

Raphaelis Regii in deprauatiões duodeci mi oratoria: iftitutio/ nis libri annotatiões.



uolumine oratorem.
Quirilanus & cis daffucultaris frente, & fe
ponifimu Cocronem
fequioficair. Fefelite
aut e pintium a paruis
corpamus. Citra dipply
thōgai ceperamus m/
hi egédu uidec usirel
ligatur fumpferamus.
Quá na lati fumus
ablati. V. uocali i [65]

Quain altu fumus ablati. V. uocali i icouerfa fimus reche legi tur.

It igitur orator quem conflicui mus.Loco illius fpolition coalcriben mus legat. Colligit au té Fabius no posse esse nifi bonum uiscorato uis ista dicedi malicia instruxerit. Hiclocus ad sensus absolutione aut freclat uerbu aut fimile defideratut cer te loco illius que repor nédű cötéderim ut le gaf.hoc mo.ld non co tani:ur fi uis ifta dicen di malicia instruxerio nihil fit publicis priua tifqi rebus priciolius eloquetta. Reguipla natural co quo perpue idulfiffe homini uide tur. nos quoquacate ris aialibus separasse: nő parés: fed nouerca fuerit.Semidochialicu ius temeritate factu é: ut hiclefus exapto& cádido obscurior diffi ciliorgi redderef. Is.n. qcuq fuent:putaut: il lud quog couctione cc ordissubiuchui:co quilli pnomini nos fu

inidano ai aduerrés hoc loco et ablatuu eu illa q copula colligarii ac ideireo ate illud, pnomé nos collocitéur quo mo Fabrits feriptu religitic legat. Quo q nos a cateris ai aliba fepaffe. Quo d fi agrou nimia cua ascede legit de recle oiba fere lega un fed page Fabri pposito nimia agrog cuta cou ei reu incapan d'rusticis.

#### Duodecimus



Entű elt ad pté opis deltinati löge grauissimät Cuius egde onus si tătu opinice prima cocipe re potuillem: quo me premi feres fentio: matu rius cosuluissem uires meas Sed initio pudor omittendi q pmifera tenuit:mox qq fingulas quoq: pteslabor crekerer:ne pderé q ia effecta erat:poés difficultates aio me fustétaui. Q ua re nuc quoq; licet maiori q unq mole premar: tú pspiciéti finé mihi costitutu é uel deficere potius q despar. Fefellit at quinitiu a puis cepa

mus-mox uclut aura folicităte puccti logius: dű tâtű nota illa & pleriles artiú scriptoribo tractara pracipimus:nec adhuc a littof peul uidebaurs & multos circa uelut jilde le uétis creder ausos hébamus. la cu eloquédi rôné nouillime reptă paucillimilq: téptată igreffi lumos:ratis q iă pcul a portu receffillet rapiebat. Poltq vo nobis ille:qué iltituebaus : orator a dicedi magiltris dimillus: aux luo ia ipetu fere saut maiora fibi auxilia ex iplis sapičtix penetralibo petiti ĝi altŭ simus ablatis ĉintire cœpimus. Nuccalu undigi & undigi potus. Vinu mo i illa smesa uastitate cernere uidemur.M. Tulliu:q tii iple quis tâta atquita istructa naue hoc mare i greflus:cotrahit uela:ihibetos remos:& de iplo demú genere dicedi:quo lit ulurus pfectus orator: fat het dicer. At nra temeritas et mores ei coz nabié dar: & affignabit officia: ita nec atecedété côfeq possumus: & lôgi us cúdű é. Vt res feret: phabílis tű cupiditas hőeftőg: ét tutioris audacie é téptare: qbus paratior uenia é. Nő posse oratoré nisi uigi bonű esse. It ergo nobis orator: qué is stutimus: is q a.M.Catóe sinit : uir bous

diccdi pitus.uese id qd ille posuit prius: & ipsa natura potiusac ma ius é utiquir bonus:id no co tatu: qd li visilla dicedi malitia istru xerit:nihil fit publicis privatifq; rebus pniciofius eloqutia:nofq ipfiq p uirili pte coferre aligd ad facultaté dice di coati fumus : pellime mercaz mur de rebus huanis: si latroi coparemus hac arma no militi. qd de no bis loquor. Reg. ipla natura i co pracipue idulfille homini uidet quoqu nos a cateris aialibus separalle:no pares:sed nouerca fuerit: si facultate dicédi socia sceleru. aduersam inocentia. hosté ucritatis inuenit. Mutos ananalci & egere oi rone latius fuillet : q puidetix munera in mutua pni cié couertere. Logius tédit hoc iudiciú meu. Negr. n. tatú id dicoreu q fit orator:uise bonu eé oporter: sed ne sutuse que oratore nisi uise bonu. Nã certe nec itelligétia cocesseris iis: q pposita hoestor ac turpiú uia peioré feq malut neqs prudétiá: cú grauistimas frequer legu: sempuero mala cosciétia prenas a semetipsis iprouiso res exitu iduant. Q uod si nemi ne malum effe nisi stultu eude non modo a sapientibus dicit: sed uulgo quoq fempest creditu: certe non fiet ung stultus orator. Adde q ne stuz dio quide opis pulcherrimi uacare mens nisi omnibus uitiis libera po/ test. Primum q in code pectore nullum est honestoru turpiuma cofor tiú:& cogitare optima fimul & deterrima no magis est unius ai : q eiul/ bitacidá: nó aiaduertes hoc loco et ablattuú cú illa q copula collegati ac idento áte tilud promé nos collocam dú: ut quo mô Fabius scriptú religisíc legas. Quo q nos a cateris aialibus sepasso. Quo d si agros: nimia cu ea Sic q de legis & recte o los fere legi us sed paye Fabis popolito nimia agros; cura coucire us negand susticis

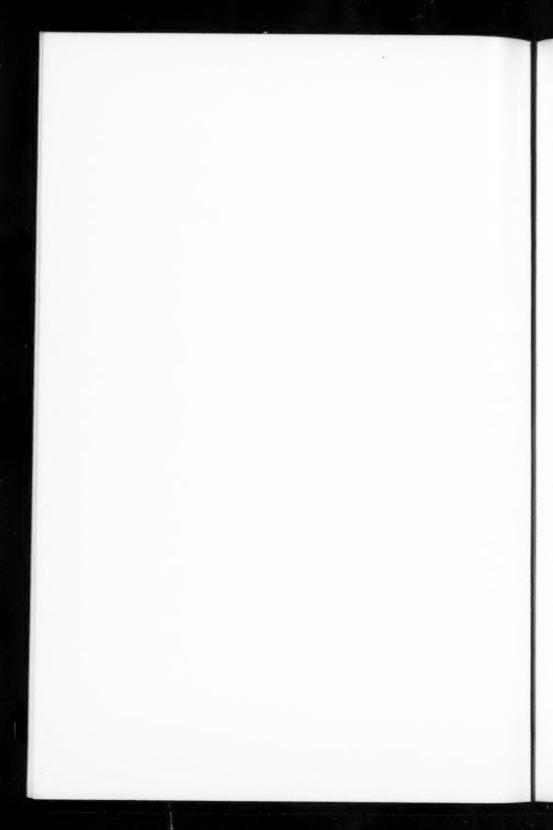
Raphaelis Regii in deprauatiões duodeci mi cratoria iflitutio nis libri annotatiões.



Entié ad ptés manu ushoe ulumo

uolumine oratorem Quitthanus & ces dif ficultatis prexit. & le potifimu Ciceronem fegusoftedit, Fefellit át o initium a paruis ar ginnum a parois cerpamus. Citra diph thôgu cepcramus mi/ hi legedu undef: ut îrel ligat füpferaus. Qua in altu fumusablataut uocali mi conuerfa fi/ mus recle legitur.

It igitur orator quem constitus mus Loco illia ppolitióis có alcriben da i uidetur:ut iftitus mus legat Colligit au té Fabius no polle elle nifi bonů une orato/ ré. Id no co tátů: od fi uis ista dicedi malitia instruxerit. Hic locus ad fenfus absolutione aut spectat verbu aut simile desideratius cer te loco illius ad reponedű cötéderim ut le/ gat hoc mo ld no co tatiunt fi uis ifta dicen di maliciá infliuxent: nehal fit publicis praua tifg sebus priciolius eloqueria. Regispla natura i co quo præci pue iduififfe hoi unde turinos quogracete ris aialibus leparaffe: no parés: fed nouerca fuerit.Semidochi alicu ius temeritate factu é: ut hic léfus ex apto & cádido obícurior diffi cilior ge redderef. Is.n. gciq fuerit:putauit il lud quoqi conictione ecordis iubiúcitui: eo gulls pnomini nos fu



ing types were in use, notably the S with the dog, duck, and lilies and the V with shanks keeping apart the three jovial compan-

ions, who appear to be otherwise at ease!

In the matter of watermarks, those of Edition 2 are scarcely distinguishable and the variations are too few to arouse suspicion. In Edition 1, thirteen watermarks are used, which we shall attempt to describe, citing the watermark listed by Briquet12 to which they bear closest resemblance, and the signature or signatures in which each watermark may be found:

1. Balances within a circle suspended from a cord with two knots or circlets. Briquet 2537 (Venice, 1489) and 2529 (Udine, 1478). x-y.

2. Balances within a circle suspended from a cord with one knot or circlet and a six-pointed star. Briquet 2953 (Venice, 1492). B.

3. A cross surmounted at the top by seven balls, with an encircled crown at the feet. Briquet 4692 (Venice, 1482). f-h.

4. An oxhead, with eyes, beneath a cross. Briquet 14519 or 14520 (Venice, 1480; Brescia, 1485). a-d.

5. Balances suspended from a cord with a knot and a six-pointed star. Briquet 2437 (Catania, 1426; Fabriano, 1404). B.

6. A bell suspended from a cord or wire bent at a right angle. Briquet 4060 or 4061 (Venice, 1491). i-m.

7. A cutlass and a crown. Briquet \$143 (Eichstätt, 1493). First or last sheet of signature e, if found.

8. An oxhead, with eyes, surmounted by a cross with an intertwined serpent. Briquet 15372 (Venice, 1487), r-u.

9. Balances within a circle suspended from a crown. Briquet 2510 (Venice, 1490). n-r.

10. A hat with strings. Briquet 3389 or 3391 (Florence, 1480-81). y-z, &.

11. Balances within a circle suspended from a cord with two knots or circlets and a six-pointed star, accompanied by the letter W. Briquet 2591 (Venice, 1496). Sometimes found in signatures u and r.

12. Balances within a circle, knotted at the head of the cord. Briquet 2591

(Venice, 1491-92). e, h-i.

13. A perpendicular bar over a horizontal bar, almost forming a cross, from which the letters R and V are suspended in the manner of balances. Fore edge margins of B, J.

With exception of watermark 11, all appear to have existed during or before 1493. It is just possible that this watermark existed several years earlier than 1496, the date of the earliest

<sup>13</sup> C. M. Briquet, Les filigranes (Paris: Picard, 1907), I-IV.

document in which it was found by Briquet. It is also possible that sheets with this watermark were printed as late as 1496 or reprinted to replace original sheets which by that time had been lost or destroyed. A watermark of later date appears in the final quire of Edition 2. It resembles Briquet 498, for which the date of 1508 is suggested as earliest. An anchor within a circle may be readily seen, but the fore edge of some copies may be trimmed too closely to permit the sight of the majuscule A with a bent cross bar.

If either edition was printed during 1493, it may be regarded as the first containing both the text of Quintilian's *Institutiones oratoriae* and the commentaries of Raphael Regius, a professor of rhetoric at the University of Padua. Perhaps neither edition is representative of the first impression. There appears to be no reason for printing either after the retirement of Raphael Regius from the university faculty, which certainly occurred before 1520. We may well doubt if Professor Regius was able to collect royalties on both editions, or to distinguish between the two

without the aid of spectacles.

Perhaps in America today an author's risks are as great as they were in the Venetian Republic during the first two decades of the sixteenth century. Perhaps libraries are acquiring books, pamphlets, and broadsides without taking due precaution to secure perfect and genuine copies. Perhaps so little is known of the history of printing that adequate precautions cannot be taken either in the interest of libraries or that of authors. The most gratifying progress has been made in the study of printing in fifteenth-century books, or incunabula, but most of this has been made by European bibliographers. In America there still remain large collections of incunabula without typographical classification, and metropolitan areas without union check lists. In the study of British imprints, the way is paved by the Cambridge check list of C. E. Sayle, 13 and there seems no reason why a repertory of British printing types cannot be compiled. If American printing types should be studied, it may be de-

<sup>13</sup> C. E. Sayle, Early English printed books in the University Library, Cambridge, 1475 to 1640 (Cambridge: University Press, 1900-1907), I-IV.

sirable to extend the repertory of British types beyond 1640. since many broadside proclamations issued by colonial governors were printed in Great Britain, as were also many works relating to colonial America. It might eventually be desirable to inaugurate work on an American typographical repertory. and perhaps later to include descriptions of type characteristics of early typewriters. The need might also arise for a reference work dealing with watermarks and other characteristics of paper manufactured in British and American mills, especially before 1000.

Perhaps American printers never have surpassed in craftsmanship the printers of Germany and Italy, and perhaps they never will. But even if the history of British and American printing should be more replete with reprints and counterfeits than with examples of fine printing, even if there are numerous examples of mediocre and inferior printing, might it not be worth while to collect and preserve descriptions and measurements of their printing types? Even if such a type repertory should exert no influence whatever in improving the craftsmanship of printers, even if it should encourage rather than discourage reprinting and counterfeiting, even if it should create more demand for photolithoprinting than for typographical composition, even if it should prove of no benefit whatever to librarians as a reference tool, might not the craftsmanship of British and American printers be worthy of such a monument?

## AN APPRECIATION OF SIR EMERY WALKER

GRETA LAGRO POTTER

shortly before the turn of the century and those published shortly before the turn of the century and those published today! In the earlier publications yellow paper, bad type, gray ink, and poor bindings were often combined with other faults. Some books had rivers of white which led the eye up or down the page; others, published about 1900, had such distracting illustrations and ornaments that the author and his message were quite forgotten. Today, however, even the seventy-five cent reprint invites one to read because the jacket is attractive, the type legible, the ink good, and the paper not displeasing to the eye. Decorations and illustrations are usually unobtrusive, and the reading matter is properly imposed on the page.

It might be supposed that competition among publishers has been responsible for the improvement during the past forty years. However, this is not the case. Great quantities of type prevented publishers from making better books until an insistent demand had been created. This was done to a great extent through the work of a man little known in America, who has been content to remain in the background while those he inspired to create beautiful books have been acclaimed. Without Sir Emery Walker three monuments of modern typography—the Kelmscott Chaucer, the Doves Bible, and the Ashendene Dante of 1909—would not have been created. The renaissance of fine bookmaking might have been postponed.

The beginnings of typography in England were not particularly auspicious. The father of English printing, William Caxton, who was governor of the English Merchant Adventurers at Bruges, finished the translation of Raoul Lefèvre's Recueil des histoires de Troie in 1471. Because, even with the help of scribes, enough copies could not be written to satisfy the de-

mands of his friends, Caxton, weary of copying, learned the new art of printing and made the first book printed in English in 1474 or 1475. Although this translation was important in shaping the English language, the book itself was not typographically good, for Caxton had learned printing at Cologne and used rude, black semi-Gothic type instead of imitating the better Rhenish printers or those of France and Italy. Although Caxton is famous for having established the first English press at Westminster in 1476–77, he is not noted for the production of artistic books because of his poor taste in type. Other printers followed him in rapid succession, but for the most part there was little improvement in type styles. Roman types were not used in England until 1538.

William Caslon, known in his day for silver chasing and the engraving of guns, made a most important contribution in 1722 by designing a Roman type which bears his name. This is in common use today. Had his example been consistently followed, printing would not have reached such a low ebb in England. John Baskerville made dignified, symmetrical, elegant Roman type designs which, although influenced by his contemporary, Caslon, were strongly individual. Baskerville had learned handwriting from a gentleman to whom he had been footman. He had turned his talent for handwriting to the cutting of inscriptions on tombstones, and finally to type

design.

The Charles Whittinghams (uncle and nephew) began work at the Chiswick Press in 1810 and caused what might have been a real awakening by going back to an old fifteenth-century face. In 1844 they revived Caslon type which was used in 1848

for The diary of Lady Willoughby.

Following the industrial upheaval of the eighteenth century, mechanical production of books in large numbers caused a general deterioration in typography. In spite of the work of the Whittinghams, the period was one of extreme pretentiousness in printing. In the 1880's, through the work of a half-dozen men, there came a return to better standards.

In 1888 the Arts and Crafts Exhibition Society, the fore-

runner of many such organizations, was founded by William Morris, Walter Crane, Emery Walker, and others. It was at the first exhibition in November of that year that Emery Walker lectured with important consequences. Shy and unaccustomed to speaking in public, he stumbled through the talk on "Printing." He illustrated it with lantern-slide enlargements which revealed the perfection of the type designs of the early printers who had closely imitated the handwriting of the monks and scribes. In the small audience was William Morris. already famous for his artistry in textiles, tapestries, and furniture; for his socialistic experiments; and for various writings in prose and poetry. Many of his works were on display at this exhibit, but none of his books were worthy of a place from the standpoint of typography. In fact, printing was represented only by commercial work. Morris had made a collection of incunabula, but had been interested in them mainly for their woodcuts, failing to notice the beauty of the type. He was deeply impressed by his friend's lecture. May Morris writes in the introduction to the fifteenth volume of Morris' collected works:

After the lecture Father got very much excited. The sight of the finely proportioned letters so enormously enlarged, and gaining rather than losing by the process, the enlargement emphasizing all the qualities of the type; his feelings so characteristic of him, that if such a result had been once obtained it could be done again, stirred in him an overwhelming desire to hazard the experiment at least. Talking to Emery Walker on the way home from the lecture, he said to him, "Let's make a new fount of type." And that is the way the Kelmscott Press came into being—the outcome of many talks between the two men, which had needed just this impetus, this spur of excitement, to turn the desirable thing into the thing to be done.

Experiments were begun on an unused font made fifty years before. The result was the successful printing of *The house of the Wolfings* at the Chiswick Press. Thus encouraged, Morris founded the Kelmscott Press at Hammersmith in 1889. Emery Walker, who had been his constant inspiration and guide, was invited to become a partner in the venture, but he felt he could not do so because he was a poor man. In his share of the re-

sponsibility, however, and in the joy of success, he was a real partner.

Walker's father had been a coachbuilder who became blind when the son was in his thirteenth year. Inasmuch as his father's affliction meant the end of his formal education, Emery began to earn his own living at the age of fourteen. After trying various kinds of work he became associated in 1873 with Alfred Dawson, of the Typographic Etching Company, with whom he learned process engraving and the use of the Albion hand press. In 1883 he became acquainted with William Morris with consequences so significant in the history of bookmaking. Without Morris, whose every new idea was hailed by an interested world, Emery Walker's fine idealism might not have produced results for many years. On the other hand, the greatest work for which William Morris was in any way responsible would not have come into being without Emery Walker.

For the Golden type, which was so named because it was cut for *The golden legend* (though first used for *The glittering plain*), Emery Walker had enlargements made of the most important fifteenth-century Roman types, including that of Nicolas Jenson. With these enlargements before him, William Morris designed his letters—Roman with a trace of Gothic. When both men were satisfied, the letters were sent to Edward P. Prince to be cut. Fine volumes were produced. But Morris, with his love of the Gothic, was not content until he had made new fonts, the Troy great primer and the Chaucer (like the Troy but in pica). These were round Gothic, based on the types of Peter Schoeffer, of Mainz; Gunther Zainer, of Augsburg; and Anthony Koburger, of Nuremberg.

The task of making the Chaucer required five years in project and over three years in the actual making. The handmade paper with a perch watermark was made in co-operation with Joseph Batchelor. The ink was made by Jaenecke, the celebrated inkmaker of Hanover, Germany; the red was of pure vermilion. The type punches were made by hand, but the casting was done by machine. There were even black letters closely spaced, words and lines all correctly imposed on the

pages. Morris, himself, drew the ornamental initial letters, and Sir Edward Burne-Iones, a friend of Morris since Oxford days. furnished ninety illustrations which were engraved in wood by W. H. Hooper. There were also a full page woodcut title. fourteen large borders, eighteen frames for pictures, and twentysix large initial letters. Special copies were printed on vellum made from the skin of calves not vet six weeks old, and two were bound in white pigskin with elaborate gold tooling designed by Morris and executed at the bindery of Cobden-Sanderson by Douglas Cockerell.

The book startled the world because of its sheer loveliness and perfection in every part—the product of a master craftsman-artist under the guidance of a practical pressman of exquisite taste. Morris evolved most of the principles by which he worked, and the Chaucer is an expression of them. He apologized for the unrestrained decoration which he could not resist because he was a decorator. No one can tell how much Morris owed to Walker, for the latter gave freely of his time, his practical knowledge, and his fastidious taste. Emery Walker's was a labor of love for a dear friend. But Morris had warned him, "mind I shall want to do everything my own way."

Publishers hoped the Morris books were just a fad, but an insistent public wanted more. Imitators sprang up everywhere, for the most part copying the faults of Morris with little understanding of his splendid basic principles. A few, however, were able to capture the charm of the Kelmscott. In this country Frederick Holland Day, of Copeland and Day, and Bruce Rogers made artistic imitations. Bernard Shaw, speaking of the little leaf ornaments which Morris used to keep white spots from marring the evenness of the black, said, "Idiots in America peppered such things all over their 'art' books."2

Morris died soon after the completion of his book. One of the most important results which he achieved was to turn atten-

Quoted by B. H. Newdigate, "Contemporary printers: II Emery Walker," Fleuron, No. 4 (1925), p. 64.

Ouoted by W. D. Orcutt, In quest of the perfect book (Boston: Little, Brown, 1926), p. 70.

tion to the perfection of the early type faces. With Emery Walker, Morris had learned or formulated sound principles which he gave to the world, thereby inspiring improved craftsmanship. And he proved that there was a public willing to pay for beautiful books. His designs are in the British Museum, not to be used for a hundred years after his death. Trustees may use his types according to his instructions, but thus far they have appeared only for Morris' own works.

In his productions Morris had departed from certain principles laid down in his writings: or was he voicing Walker's idea when he said that books were made to be read and that legibility should be the first aim? Morris' books were so distractingly beautiful that they will be enjoyed as works of art while less pretentious editions will be chosen for reading. After a period of unsuccessful imitation the principles of Morris might have been forgotten but for Walker, who was such a close friend that he even nursed Morris during his last illness. Walker understood the ideals of Kelmscott and was able to present them more clearly than had Morris.

Shortly after the death of Morris, Thomas James Cobden-Sanderson, who confessed that he hadn't a penny, proposed to Emery Walker that they jointly establish a press. Mrs. Cobden-Sanderson furnished the capital and in 1900 the two men, as equal partners, founded the Doves Press. The purpose of the press, as stated in its catalog published in 1908, was

.... to attack the problem of pure Typography, as presented by ordinary books in various forms of prose, verse and dialogue, and keeping always in view the principle.... that "The whole duty of Typography is to communicate to the imagination, without loss by the way, the thought or image intended to be conveyed by the Author," to attempt its solution rather by the arrangement of the whole book, as a whole, with due regard to its parts and the emphasis of its divisions, than by the splendour of ornament, intermittent, page after page.

Cobden-Sanderson was a mystic who had sought vainly for a medium in which to express himself. He had studied mathematics and medicine, had been a parliamentary lawyer, and later a manual laborer. While he was visiting at the Morris home, Mrs. Morris suggested that, inasmuch as he wished to use his hands, he might add an art to their community by turning to bookbinding. In this craft Cobden-Sanderson found himself and soon became one of the great binders of the time, expressing his "Cosmic Vision" in the art. Emery Walker and he, working together, could reveal their mutual ideals in complete volumes, the work of each partner supplementing that of the other.

Although Cobden-Sanderson had no practical knowledge of bookmaking except for the binding, in *The ideal book*, published in 1901, he clearly defined The Book Beautiful. He may have absorbed this perfect concept from Emery Walker. In an unpublished letter to William Dana Orcutt dated July 13, 1927, Emery Walker stated that Cobden-Sanderson was not qualified to judge type, that in fact he had confessed that he had never seen a printing press until he called one day for the purpose, after the Doves Press was established. Emery Walker had designed the type, and most of it was cut before Cobden-Sanderson even saw it.

At a sale of William Morris' books Walker had purchased the copy of Pliny which, with other fifteenth-century volumes, had served as a model for the Golden type. For the Doves type, instead of copying, Walker created an adaptation of the Jenson, more graceful than the Golden, basing it on the type cut for the Eusebius of 1470 and used for the Pliny in 1476. Because of poor inking and presswork there was hardly a clean page where the letters could be seen clearly enough to copy, had he wished to do so. Certain letters which did not appear in the Roman alphabet, as well as the arabic numerals, had to be made to harmonize. Critics do not agree, but several have expressed the conviction that the elegant Doves type at the time of its creation was the most beautiful that had ever been madesimple, well-balanced, a purified Jenson, not so black as the Golden type. Others averred that Jenson had not been excelled. Certainly the relation of upper and lower-case letters and the presswork are an improvement over Jenson.

The Doves Bible was the magnum opus of the press, expres-

sing, as much as is possible in a book, the vision and ideals of the two men. Decoration was not used because, after the perfection of the Chaucer in this respect, it would have been an anticlimax, and it was not considered a necessary part of The Book Beautiful. The enduring charm of the Doves Bible is due to the complete harmony of its parts: the plain white pigskin binding with gold letters on the back; the dignified title-page, all in capitals: the soft vellum or the handmade paper with the watermark of two doves and the initials of the two friends: the restrained Doves type, closely spaced; graceful red initials at the beginning of each book, and small red initials for each Psalm: perfect composition by I. H. Mason; and unsurpassed presswork. Dignity, simplicity, restraint, sheer beauty attained by properly composing and imposing beautifully designed type! It is utterly dissimilar to the Kelmscott Chaucer except in the closeness of the spacing, and it is a more nearly perfect book. One stops to read it because the type is so satisfying to the eye. Each contributing part of the Doves Bible is subordinated to the text, while in the Chaucer the author's message is quite forgotten in admiration of William Morris.

The Doves influence was soon felt in England and abroad. Everywhere it was Cobden-Sanderson who was credited with the fine work of the press. Emery Walker, who had designed the type and supervised the presswork, was comparatively unknown and was satisfied to remain so. But Cobden-Sanderson, of a different temperament, enjoyed the publicity and fame which had come to him. When William Dana Orcutt invited him to come to the United States in 1907, Cobden-Sanderson wrote to ascertain whether or not socialists would be barred from entering the country. Being advised that his political views would not be questioned, he and his wife sailed for Canada, where there was considerable trouble with its attendant publicity. After a satisfactory visit in the United States where he lectured before many audiences and was honored as the moving spirit of the Doves Press, he wished to carry on alone and was anxious to dissolve the partnership. Naturally, Walker loved the type and did not wish to be denied the use of it. In the letter to William Dana Orcutt he said, "We had an agreement in his own writing by which I was entitled to a half share in the Press, and that if we dissolved partnership I was to have a fount of type for my own use." At the recommendation of Sir Sydney Cockerell an agreement was reached to the effect that the type might be used by Cobden-Sanderson so long as he lived, but that at the death of either partner the one surviving should be the sole owner of the type. Because Walker

had taken no financial risk, he made this concession.

Apparently Cobden-Sanderson soon forgot the agreement, for his Journal shows that in 1911 he was contemplating the destruction of the type, and in 1913 the punches and matrices were thrown into the Thames. Forty beautiful books had been made. On August 31, 1917, the disposition of the type began. Carrying it in linen bags, loose in his pockets, or in a box, he disposed of a little each night until on Novmeber 24, when he threw the last of it from Hammersmith Bridge with the invocation: "May the river in its tides and flow pass over them to and from the great sea forever . . . untouched by other use...." Nicolas Jenson in his will, dated September 7, 1479, had stated that he was not willing that anyone have the use of his "cherished punches." They were given to the father-in-law of Aldus Manutius along with the type and their later disposition is not known. Like his famous predecessor, Cobden-Sanderson did not wish the Doves type profaned by other use.

The beautiful type consigned to the Thames! It was a dramatic gesture, a criminal act by a man who was thought to be upright—inconceivable conduct for one who had once been Walker's great friend. The type should have been placed in the British Museum, at the Oxford or Cambridge Press where it might have been used to commemorate some important occasion. In any event, it was the property of Emery Walker. The original designs had not passed from his possession. The matter almost came to a lawsuit, but through the mediation of a friend, a small sum was paid which Emery Walker said he wanted for a creditable purpose. No amount of money

<sup>3</sup> W. D. Orcutt, Master makers of the book (Boston: Little, Brown, 1928), p. 245.

could really make atonement for such wanton destruction, but "unwilling to attribute it to the motive apparent on the surface," Walker excused the act as the result of megalomania.

Meanwhile in 1902, while in partnership with Sydney Cockerell, who had also been associated with Morris, Walker made for the Ashendene Press of C. H. St. John Hornby the great primer Subjaco type adapted from that used at Subjaco in 1464 by Sweynheym and Pannartz, the earliest of Italian printers. This was a semi-Roman type based on handwriting which had not lost all of the characteristics of the Gothic. Again the numerals and certain letters had to be supplied. Walker had instructed his friend Hornby in the Kelmscott tradition which together with Hornby's individuality gave character to the work of the Ashendene Press. The splendid folio Dante of 1909 was printed in double columns in black and red with the Subiaco type. There are six beautiful illustrations by C. M. Gere, cut by W. H. Hooper. Six copies are on vellum in special bindings. Less elaborate than the Chaucer, less personal than either the Chaucer or Bible, ranking with them as a great monument to typography, the Dante is a most admirable volume. Someone irreverently described the Burne-Jones illustrations for the Chaucer as "dripping with ineffable grace," but those of the Dante, though dramatic, are dignified and simple. Harmonious in all its parts, the Dante is also a Book Beautiful. Other great books and four more folios of importance were published in Subiaco type, but in 1927 a new font was cut for the Ashendene Press.

Emery Walker was a friend of Charles Ricketts of the Vale Press, where the same ideals are expressed. He helped Elizabeth Corbet Yeats, daughter of William Butler Yeats, to found Dun Emer (now Cualo) so that Irish working girls might learn fine craftsmanship. Bernard H. Newdigate of the Shakespeare Head Press said, "Others beside myself would gladly and gratefully own that nearly everything that is worth anything in their own practice as printers comes directly or indirectly from his counsel and example."

B. H. Newdigate, op. cit., p. 66.

Insel-Verlag, of Leipzig, Germany, sought Walker's advice and employed him to supervise the reprinting of the German classics. This resulted in a renaissance of good printing in Germany. France, Holland, and Czechoslovakia, as well as other

countries, owe a definite debt to him.

In the United States there were those who were doing good work almost unnoticed before Emery Walker had inspired Morris. Theodore Low DeVinne, beginning in 1850, had labored patiently to improve the appearance of the everyday book and he had succeeded to some extent in purifying American typography. But he received little attention, although now the books setting forth his sound principles are regarded as important for reference. John Wilson and Henry O. Houghton had produced fine books of mechanical excellence. It was not until Walker had stimulated Morris to the point of proclaiming his new interests that fine bookmaking was widely appreciated.

Frederic W. Goudy and his wife acknowledged the debt to the two English pioneers by issuing their essay, *Printing*, as the first book published by the new Village Press in 1903. Although Goudy had established his first press in 1895, Will Ransom, one time his apprentice, said in regard to the publication of this essay, "It was both a gesture of acknowledgment to those two pioneers and a sort of credo, an indirect statement of the aims and ideals upon which the press was founded." Like Walker, the Goudys studied the old types to discover what made them good and they carried Walker's ideas farther by making a great many varied types suitable for use today.

Daniel Berkeley Updike, who founded the Merrymount Press in 1893, had already begun to make his individual contributions before Kelmscott and Doves were known to him. Guided more by the Whittinghams, who went back to a fifteenth-century Basle printer, he, too, sought inspiration from older models, but not necessarily from the Italian. However, at least one type, the Merrymount, designed in 1895 by Bertram Grosvenor Goodhue, was based on Jenson, "but seduced by Morris' unduly black type." Although his press was not so greatly in-

<sup>5</sup> Private presses and their books (New York: Bowker, 1929), p. 82.

fluenced by Walker, Mr. Updike acknowledges his greatness thus: "Morris's learned associate and a man who (as everyone but himself would admit) has been the moving spirit in most of the good and scholarly ventures in modern English

typography."6

Bruce Rogers had graduated from Purdue in 1890 and was interested in illustration when he first saw a Kelmscott volume. Greatly impressed, he realized that the beauty of books did not depend on the illustrations alone and his interest in typography was definitely aroused. He was connected with Copeland and Day and later with the Riverside Press which he raised to a place of great distinction. Influenced by the popularity of Morris this press had established a department for finely printed books. The first type Rogers designed was the Montaigne which was based on Jenson. The Centaur, which is far finer (many think it superior to the Doves), was based on

French sixteenth-century type.

Since their aims were alike it was inevitable that Emery Walker and Bruce Rogers should be friends, and the two corresponded regularly for many years. After a visit with his older friend, Bruce Rogers desired to become a free-lance printer and to work out his own ideas. Late in 1916 Rogers sailed for England to join Walker in founding the ill-fated Mall Press. Unfortunately, because the pressman was called to war and efficient workers could not be found, only one small volume was printed—a translation of Albrecht Dürer's On the just shaping of letters from his Geometriae. Bruce Rogers alone had to pull the sheets of paper and vellum through the press for 317 copies. It was a most difficult task for one unaccustomed to this kind of manual work, but in spite of cold, uncomfortable quarters, and inconvenient working conditions, the result was most creditable. This was the only volume attempted under such difficult circumstances.

Again in 1928 Rogers returned to Emery Walker's office, this time for a stay of three years to supervise the making of Thomas

<sup>&</sup>lt;sup>6</sup> Printing types, their history, forms, and use (Cambridge, Mass.: Harvard University Press, 1922), II, 210.

Edward Shaw's (Colonel Lawrence of Arabia) new translation of the Odyssey, printed on Walker's handpress with the imprint of his firm. This beautiful quarto with its classic medallions on gold background is the most beautiful of his productions and one of the most nearly perfect books ever made, truly harmonious in all its parts. At the same time he was engaged in planning his great folio lectern Bible for the Oxford University Press—a book which was six years in the making. In 1928 there was some difficulty in finding a Bible suitable for King George the Fifth to present to the Memorial Church at Ypres, and, although a Bible was selected, it was not considered completely satisfactory. Bruce Rogers revised his Centaur type and set out to make the finest folio Bible which could be printed.

Bruce Rogers and D. B. Updike have both been interested in making charming little volumes. They have found types to suit the texts rather than books to fit certain type, as the Kelmscott and Doves presses had to do. Further, they have used machines to aid in production. The Merrymount Press can print all varieties of books under one roof and has become the most distinguished press in America. Rogers, who also uses a variety of models, has become the most versatile modern printer. Both men have departed from pretentiousness and have combined

the practical with the aesthetic.

Bruce Rogers believes that "A beautiful book should first be an efficient instrument; it should be legible and easy to read. It may at the same time be a work of art, with a beauty and personality of its own." This is an improvement in statement over the credo of Morris and Cobden-Sanderson; it shows development in the right direction from a sound foundation, and incidentally both Rogers and Updike have striven to fulfil Walker's desire that moderately priced books be made as nearly perfect as possible.

Francis Meynell, who directed the Pelican Press in London and who established the Nonesuch Press, also departed from the making of limited editions. Machine production, economy,

<sup>7 &</sup>quot;Points of View," Saturday review of literature, XXIX (1927), 268.

and careful attention have enabled him to make good books within a low price range.

During the past thirty-five years many who have been working at the improvement of the everyday book have been giving the ideals of Emery Walker their satisfactory expression. This was his ultimate aim. Emery Walker provided the backbone of the work of the pioneer artists in the renaissance, helped in shaping the underlying principles, and laid foundations on which others have successfully built, even excelled him. Through fifty years he was an inexhaustible source of practical knowledge, of exquisite taste, of unbounded enthusiasm, generously giving advice in every scholarly venture where his aid was desired, and guiding various schools of arts and crafts so that the perpetuation of his idealism is now assured.

An appreciation of his work was privately printed after his death. Sir Sydney Cockerell, now of the Fitzwilliam Museum, Cambridge, paid him a loving tribute, emphasizing the fact that although his work with the Kelmscott, Doves, and Ashendene Presses was of great importance,

his great reputation among students of typography rests on a far wider basis, for he was keenly preoccupied with the appearance of the everyday book, and not only with its rich relations. It is scarcely too much to say that his influence, direct or indirect, can be discerned in nearly every well-designed page of type that now appears, and that to him more than to any other man this century's great achievement in ordinary book production has been due.... his advice has been sought times without number, often from Germany and America.... and has been freely given.

Sir Emery Walker was a man of distinguished but unassuming appearance, great gentleness of manner, and of unswerving rectitude of thought and deed. His taste was instinctively fine and extremely sane. It would be difficult to exaggerate the respect in which he was held. Few who knew him would hesitate to declare that he was the best loved of their acquaintance.<sup>8</sup>

Mr. John Johnson, printer to the University of Oxford, said that the generosity of his ideals produced "in his typography a courageous nobility which was an expression of the man's

<sup>&</sup>lt;sup>8</sup> Sir Emery Walker, Born 2nd April 1851, Died 22 July 1933. Emery Walker, Ltd. Privately printed. No paging.

character." Others called attention to the fact that Emery Walker had presided over the destinies of the London schools of arts and crafts, and had done much to promote the development of photoengraving and lithography. From this impluse his idealism is spreading and will reach far into the future.

Because Walker always remained modestly in the background, letting others receive credit for achievements in which he had a major part, general recognition of his great contribution came late in his life. In 1904 he had been happy to be Master of the Art Workers' Guild; he was an honorary member of the the Grolier Club and of the Athenaeum, trustee of the Wallace Collection, and active in various societies and Royal Commissions. He had been Sandars Reader in Bibliography since 1924, but it was not until he was nearly eighty years old that he was knighted by King George the Fifth. Shortly before his death, in 1933, he was made Honorary Fellow of Jesus College, Cambridge.

At his funeral, in the chapel by Golders Green, his long-time friend, Dr. John William Mackail, read passages from the great Doves Bible to the large company of colleagues gathered for

their last farewell to a great man.10

<sup>9</sup> Ibid.

To For source material the author is indebted to William Dana Orcutt; Mrs. George Madison Millard, of the Little Museum in Pasadena; Sir Sydney Cockerell, of the Fitzwilliam Museum, Cambridge; and to Bruce Rogers. Books or articles by the following were used: Douglas C. McMurtrie, Daniel Berkeley Updike, Stanley Morison, Paul Johnston, John Clyde Oswald, Will Ransom, G. S. Tomkinson, Bernard H. Newdigate, Alfred W. Pollard, H. Halliday Sparling, Robert Alexander Peddie, John William Mackail, Arthur Clutton-Brock, William Morris, Thomas James Cobden-Sanderson May Morris, Emery Walker, Frederic Warde, William Rothenstein, and many others

## THE CONTRIBUTORS TO THIS ISSUE

Lester Condit: for biographical information see the Library quarterly, VII (1937), 577.

THOMAS EDWARD KEYS was born in Greenville, Mississippi, in 1908. He received the A.B. degree from Beloit College, Beloit, Wisconsin, in 1931; was awarded a Carnegie fellowship at the University of Chicago in 1932; and a research assistantship at the same school in 1933. During the summer of 1933 he attended the University of Michigan Department of Library Science. He received the M.A. degree from the University of Chicago in 1934. Mr. Keys was appointed assistant in the order department at the Newberry Library in 1931, was made assistant librarian at the Mayo Clinic in 1934, and since 1935 has been reference librarian of the Mayo Clinic. He is the author of "Selecting medical books," which appeared recently in the Modern hospital, and has written other articles soon to be published.

GRETA LAGRO POTTER was born in Superior, Wisconsin. She received the A.B. degree from the University of Minnesota, and the B.S. and M.S. degrees in library service from Columbia University. She has been high school librarian at Fargo, North Dakota, 1919–26; head librarian of the Superior, Wisconsin, Public Library, 1926–27; and associate professor of library science at Alabama College, Montevallo, Alabama, 1929–31. The April, 1934, issue of School executives magazine published her article "The high school library," and the Library journal of June 1, 1935, contained her article entitled "What the South has done to improve school libraries."

GEORGE FLINT PURDY, librarian at Wayne University, Detroit, Michigan, was born at Mason City, Iowa, in 1905. He attended Iowa State Teachers College, Cedar Falls, Iowa (B.A., 1925); Columbia University School of Library Service (B.S., 1933); and the Graduate Library School, University of Chicago (Ph.D., 1936). Before going to Wayne he had been circulation assistant at Iowa State Teachers College, 1922–31; high school principal at Kelley, Iowa, 1925–27; and superintendent of schools, Calumet, Iowa, 1927–32.

FREMONT RIDER: for biographical information see the *Library quarterly*, VI (1936), 419. Syracuse University awarded Mr. Rider the L.H.D. degree in 1937.

#### THE COVER DESIGN

YEORGE ELD, the son of a Derbyshire carpenter, was apprenticed in 1592 to Robert Bolton, a minor bookseller, and made free of the Stationers' Company in 1600, About 1604 he married Frances Read, the widow, successively, of Gabriel Simson and Richard Read. He was approximately twenty years younger than his wife's first and second husbands but, despite his comparative inexperience in the printing business, he greatly increased the output of the establishment to which he succeeded. Not only did he issue many more books than did his two predecessors, but after he had been in charge for a few years, he began to produce a number of large and stately folios. He printed either alone, or in partnership with others. Fougasses' The General Historie of Venice, Serres' Generall Historie of France (two editions), Grimestone's A General Historie of the Netherlands, and Mayerne's The Generall Historie of Spaine-volumes forming part of a very interesting series of illustrated folio histories in the publication of which Adam Islip was the prime mover-St. Augustine's The City of God (two editions), and Babington's Workes.

Eld printed, besides the folios named above, a large number of other historical works including Camden's Remaines Concerning Britaine, Dallington's A Survey of the Great Dukes State of Tuscany, and Petit's The Low Country Commonwealth. On current public questions he issued such tracts as Bacon's Charge touching Duells, and on medicine and engineering Forestus' Arraignment of Urines and Vaughan's Most approved and long experienced Water-Workes. He printed also two

news-tracts on witchcraft cases.

It is as a printer of literature, however, that Eld is remembered today. His most important piece was, of course, Shakespeare's Sonnets which he printed for Thomas Thorp in 1609. In the same year he also printed Shakespeare's Troylus and Cresseida. Two years before he issued, with the initials W. S. on the title-page, The Puritaine or the Widdow of Watling-Streete—a play which was later included in the Third and Fourth Folios of Shakespeare.

He printed many plays, including The Return from Parnassus, The Merry Devil of Edmonton, Marlowe's Dr. Faustus, Tomkis' Lingua, and productions of Chapman, Field, Middleton, Marston, Tourneur, the Earl of Stirling, Dekker, and Webster. Both Ralph Crane, the playhouse scrivener who copied Shakespeare's plays, and Sir George Buck, the master of the Revels who licensed them for the stage, wrote books which were issued by Eld—Crane's production was a devotional treatise The Workes of Mercy; Buck's An Eclog treating of Crownes and of Garlandes. Eld's issues ranged from Southwell's A Foure-fould meditation, of the Foure Last Things to Barnes' Devils Charter and sundry works of John Taylor, the Water Poet; from the polished Euphues of John Lyly to a prison pamphlet, Hutton's Black Dog of Newgate; and from the lengthy poetical narratives of Daniel to a broadside ballad, Gallants to Bohemia; or, Let us to the Warres again.

Eld was fond of issuing his larger works in partnership with another printer, thus cutting down the required investment and speeding the printing. In 1617 he took as a partner Miles Fletcher who succeeded him when he died in the plague of 1624.

The reproduced mark was cut for the edition of St. Augustine's City of God, which Eld printed and published in 1610. It represents the sun emerging from the clouds and casting its beam on the earth; surrounding this is a motto and a frame with birds, fruits, and flowers. The motto, Sic Augustinus dissiabit ("So Augustine will drive away"), however, was removed from the mark when Eld, and later Fletcher, employed it in other books.

EDWIN ELIOTT WILLOUGHBY

FOLGER SHAKESPEARE LIBRARY

# REVIEWS

Lexikon des gesamten Buchwesens. Herausgegeben von Karl Löffler und Joachim Kirchner unter Mitwirkung von Wilhelm Olbrich. Band II, Göttingen-Petrarcaschrift. Leipzig: Karl W. Hiersemann, 1936. Pp. 640. Rm. 44.

A notice of the first volume of this "factual encyclopedia of general bibliology" has already appeared in the Library quarterly (January, 1937). This notice closed with the statement that the reviewer, after nearly a year's constant use, had "yet to find an objectionable omission, a misstatement of fact, or even a typographical error." Except for the last item, the same formula must be repeated at the end of a similar test of the two volumes in combination. Moreover, with the alphabet of subjects now two-thirds completed, the usefulness of the Lexikon has been more amply demonstrated. As a repertory of facts it has yielded material instantly which otherwise would have required long search through dozens of volumes (with many of them, of course, badly indexed). The bibliographical references, because of their selective quality, have repeatedly proved more useful than the uncritical inclusiveness of either exhaustive subject guides or the periodic lists of library literature. And finally, the work is astonishingly readable: any bookman, beginning at a random entry will find himself led on by cross-references to others and from these to still other subject headings until, before he knows it, he has traversed systematically a wide area in booklore, which, elsewhere, may never have been discussed as a unit. For example, the present writer, starting from the article "Livres d'heures," was enticed to those on Calendar, Lectionary, Epistolary, Evangelary, Nocturnale, Matutinale, Diurnale, Capitulary, etc., and was thus given a brief course in "liturgiology for bookmen" such as would be difficult to extract from either the systematic treatises on the subject, or even the ecclesiastical encyclopedias.

Not only every library school but also every major reference library should acquire this work, despite both the high cost of marks in our deflated dollars and the dearth of students able to read German.

PIERCE BUTLER

Graduate Library School University of Chicago How adults read. By Guy Thomas Buswell. ("Supplementary educational monographs," published in conjunction with the School review and the Elementary school journal, No. 45.) Chicago: University of Chicago Press, 1937. Pp. 13+158. \$1.50.

This study represents another valuable contribution to the field of reading studies, already enriched by previous works from the same author. The reading of one thousand adult subjects was investigated with the definite purpose of relating reading as a problem to the whole field of adult education in one major American city—Chicago. The study was designed to answer two questions: (1) what will an analysis of the reading abilities and habits of adults show, and (2) what will be the effects of a short, intensive remedial period? At the same time it endeavored to determine what techniques and methods are most worth while in such remedial work.

After a careful analysis of eye movements (by means of the photographic technique), oral reading, and vocalization in adult reading had been made, the data were examined for the purpose of selecting those factors, basic to the reading process, which were then to be used for experimentation in remedial classes. Four such factors were determined upon: (1) development of a broader span of recognition; (2) development of more sure recognition; (3) increase in the speed of perception; and (4) reduction of vocalization in silent reading. In a way, these four factors in reading provide an answer to the first of the two questions listed above.

The results of the experiment with the remedial classes of adults prove that adult reading can be improved. Among the various findings of the study, as a whole, the following may be listed as important to persons interested in adult education:

- Younger adults showed greater improvement in reading than did older adults, whose reading habits have long been fixed.
- A large number of adults still read in an immature manner—giving attention to words rather than to grouping of words.
- The greatest improvement in reading of adults, grouped according to the amount of schooling they have had, lies between those who have had only six years or less and those who have completed Grades VII and VIII.
- Classes for adults may expect to profit considerably if some attention is given to the techniques of reading in the early part of the work.
- Merely to induce adults to read widely—more books, magazines, newspapers, etc.—will not of itself improve their reading ability. Habits are not improved by mere repetition; they may be thus fixed the more firmly.
- 6. The general reading ability of adults is much lower than that assumed by teachers of adult classes.
- It is evident that the general reading ability of adults is not sufficient to provide them a basis for thinking independently on many matters of importance.

Many librarians have become familiar in recent years with tests for measuring the mechanical difficulty of adult books and realize that in the years to come the library profession will incorporate an increasingly scientific technique in its methods of advisory service. To such forward-looking members of the profession this study of reading skill and methods for improving adult ability will be of considerable interest and value.

It appears to the reviewer that Dr. Buswell's monograph can scarcely be disregarded by any teacher of adult classes and is strongly recommended to all people interested in this rapidly growing phase of American education.

SPENCER SHANK

University of Cincinnati

The role of the library in adult education. Edited with an Introduction by Louis R. Wilson. ("University of Chicago studies in library science.") Chicago: University of Chicago Press, 1937. Pp. xi+321. \$2.00.

The Graduate Library School, by sponsoring a second Library Institute in August, 1937, and announcing a third for the summer of 1938, has encouraged members of the library profession to hope that they have found here a permanent means of continuing self-education. In the volume under review those not fortunate enough to have attended in person may now read the papers presented before the 1937 adult education institute, which was held "in order to assist libraries in extending their understanding of the problems involved and to enable them to increase their effectiveness as adult educational institutions."

Librarians who have thus far concerned themselves with the fringes of adult education fall perhaps into two groups: those who are still looking for a Messiah to tell them how to do it, and those who think the profession has now devoted twelve years to worrying over the problem and should turn its thinking to something else. The present volume should prove an astringent for both groups. It is likewise full of suggestion and stimulus for those who have concerned themselves more profoundly with the implications of adult education for libraries.

Nationally-known speakers from varied educational fields contributed to the Institute discussion. College, public school, university extension, library, library school, adult education council, A.A.A., W.P.A., T.V.A., National Congress of Parents and Teachers, American Youth Commission, radio, film, and laboratory—all were represented by authorities who were concerned in varying degrees with the potential contributions of the library to adult education. The volume, as did that resulting from last year's Institute, carries a provocative Introduction by Dean Wilson which will bear re-reading as a summary as well. The reviewer particularly recommends page vi.

Two outstanding impressions result from a reading of the papers presented. One is the variety of activities under way, characterized by significant experiments and a definite working out of stated objectives. The second is the encouraging lack of standardization and definition which still marks adult edu-

cation activities. Impressive among more recent developments is the great impetus which has come from federal projects—the educational program of the W.P.A., the T.V.A. adult education program, the farmer discussion groups fostered by the A.A.A. These projects, because of unusual circumstances and resources, have been able to uncover unsuspected needs and desire for education among large groups in the adult population. The picture has been immeasurably broadened by these federal undertakings; as a permanent policy "the task of providing adequate educational services for our adult population must be increasingly assumed by our permanent educational institutions" (G. L. Maxwell, Education Division, W.P.A.).

A problem of sufficient proportions to engage the complete attention of libraries and other educational institutions is presented in the data collected by the American Youth Commission. No library worker should miss the findings and conclusions of the Commission as presented by Dr. Homer P. Rainey, aimed, as they are, directly at the library. Most significant, perhaps, is the statement: "The work of libraries must be much more closely correlated with that of the other agencies, principally the schools and program of adult education. At the present time there is too little understanding and appreciation among these agencies of the functions and contributions of each."

Librarians represented on the Institute program were concerned less than of late as to whether they and their colleagues should assume leadership in the adult education movement. One hopes that Miss Ernestine Rose speaks for the profession when she brushes aside this fruitless discussion and points out the more important fact that if we are not leaders no amount of discussion will make us so. The wide field for work is so forcefully pictured by the speakers at the Institute that the main thing seems to be to select from among countless possible and urgent lines of activity and get busy! An important conclusion is obvious from this focussing of attention on the library as an agency for adult education; namely, that whether a leadership role is assumed or not, the library must be an essential factor and "co-ordinating center" in every form of serious educational activity, whatever the sponsorship.

One is impressed, too, with the broadening concept of the role of the library, both among librarians on the program and among those "lay" speakers who have given most thought to the library as an educational agency. The signs point to the growth of a social philosophy, with implications that the library has a responsibility for direction of reading desires and a need for personnel with an understanding of social trends, familiarity with educational activities on a wide front, and a breadth of experience which will qualify them for the responsibilities of educators. Making books available is but the beginning—the easy, mechanical beginning—of the library's task.

AMY WINSLOW

Enoch Pratt Free Library Baltimore, Maryland Subject index to readers. Compiled by ELOISE RUE. Chicago: American Library Association, 1938. Pp. xviii+174. \$1.80.

Two hundred and eighty-five outstanding factual readers for the first three grades have been indexed in this volume. Standard subject headings have been used where feasible, and where topics peculiar to lower-grade activities have been analyzed, "the term to which the majority of teachers and librarians would most commonly refer, with references from other possible headings." Approximately four thousand references are entered under about one thousand subjects, with many cross-references throughout the book. The general policy has been to use specific subjects with references from general headings.

Most of the 285 readers indexed are based on modern educational methods and have been copyrighted or revised within the last ten years. In the list of readers which precedes the index proper, full bibliographic information is given. In this list, twenty readers, designated by a double asterisk, are suggested for first purchase by small libraries, and forty-five are designated by a single asterisk for second purchase, thus making this list an excellent buying

guide for teachers and librarians.

Folk lore and fairy tale readers, Mother Goose stories, humorous stories, and other readers with no factual value have not been listed. The Introduction states that it has been hard to determine in some cases whether or not a book was strictly a reader, and that some picture stories and easy reading books contain material of considerable subject value. Hence a suggestive list of such books is given under subject in the Introduction, together with a list of poetry of subject value and a list of helpful subject series for the first three grades.

The index proper is arranged alphabetically by subject with the titles of the books grouped alphabetically by author under subject. Inclusive paging is given, and, where paging is omitted, either the whole book covers the topic

or the pagings are scattered ..

The plan in grading the readers listed has been according to publishers' markings, i.e., PP for preprimer, P for primer, I for Book I, etc. Where a book is found useful to several grades or is a rather difficult reader for a certain grade, these facts are indicated, e.g., 2-3, 3+. The grading, so important in a list of this type, has been given very careful consideration, and the list of consultants is such as to warrant confidence in the result.

William S. Gray, of the Department of Education, University of Chicago,

in his Preface, writes of the book's usefulness,

since much of the material (for the primary grades) which can be read with ease and understanding is in readers and is usually quite brief, it has not been indexed by subjects in printed book lists or library catalogs. Although individual teachers and librarians have kept notes of stories found useful in the study of certain units, a more comprehensive index of the material found in the best and most used readers has been needed for some time. Miss Rue's Index is concerned chiefly with the wide use of books

in the study of specific problems and provides genuine help for teachers who organize classroom activities on that basis, and for librarians in making available both a list of the best modern factual readers and an index to them according to subjects relating to school activities.

In Dr. Gray's opinion, and in the opinion of this reviewer, the present index "should prove of great value to teachers and school officers in suggesting topics for study in the lower grades, in locating materials for use in enriching the study of numerous problems, and in ordering books which will supplement available materials. . . . . It should be available in every school which endeavors to enrich and vitalize teaching in the primary grades through the use of reading materials relating to the various units studies." One should add that it should also be available in every elementary school library, children's room, or library used by primary-grade children or workers with children of this age.

MILDRED P. HARRINGTON

Library School Louisiana State University

Teaching the use of books and libraries. A manual for teachers and librarians.

By May Ingles and Anna McCague. New York: H. W. Wilson, 1937.

Pp. 207.

The revision of a manual that has proved its usefulness to both librarians and teachers is a welcome addition to the literature on teaching the use of books and libraries. With the issuance in 1936 of an enlarged edition of Zaidee Brown's Library key, the necessity for an expansion of this work was felt because the original edition had been prepared as a teacher's manual for the Library key. The revision, however, is more than a new aid in using a single text. Although the same arrangement of content is followed, the purpose has been expanded "by making it a general teacher's manual for library instruction." In the light of this avowed purpose it is significant that the reviser, Miss McCague, has included a wealth of new material. This speaks for the painstaking work that went into making this a valuable manual, unique in its field.

In the first chapter, which deals with "Aims, organization and methods of library instruction," the change in emphasis is in the direction of more complete integration of library instruction with the regular school program and in the use of diagnostic pre-testing. The latter is an especially important suggestion, since modern educational procedures have recognized the necessity of adapting instruction to individual needs. The importance of this point is somewhat obscured by the implication that lack of standardization of library instruction is the main reason for diagnostic testing. While it is true that lack

of standardization of courses makes for greater inequalities in individual achievement, adaptation to individual needs can only be made on the basis of complete, objective analysis, such as diagnostic testing gives most perfectly. The list of references at the end of the chapter is an important addition, for the articles cited survey the suggestions on integration of library instruction

with the curriculum that have appeared since 1923.

Changes in the discussion of "The library and its arrangement" are less striking, probably because librarians have been attempting for years to explain the library to its clientele, and there are fewer new concepts or methods to present. A felicitous change in wording occurs in connection with the interpretation of library rules. The emphasis on "library citizenship" not only provides an excellent approach to the problem of library regulations but also serves for the introduction of the next topic, "The book."

The expansion of the practice work and tests in chapter iii is a desirable feature. In addition to the many suggestions given in the manual the list of references shows, through content annotations, the number of plans, exercises, and tests that are available for the unit on the study of the book.

The approach to the use of the card catalog as presented in chapter iv is about the same as in the earlier edition; but the utilization of its suggestions is expedited by the method of presentation. The long paragraphs have been broken up into a series of specific topics, each with an italicized heading. Among the suggestions for practice and testing the introduction of an "Explanatory or pre-test for this unit" is particularly significant. It is unfortunate, however, that the example lacks comprehensiveness. The emphasis is on the problem of alphabetizing, omitting a number of other important factors of student difficulty that should be considered in any remedial program of instruction. Many sources of illustrative material for teaching the use of the card catalog are suggested in the Bibliography.

A chapter is devoted to the problem of dictionaries, with a variety of exercises suggesting the numerous approaches possible. This is followed by the chapter on encyclopedias, which has been enriched by the inclusion of references to much free material available from the publishers of encyclopedias. In both chapters the utilization of material has been aided by the introduction

of more specific headings.

In chapter vii the discussion of "Reference books" has been strengthened considerably by the expansion of the list of books described and by the longer list of questions on specific books. More emphasis on the comparison and analysis of reference books would be an important addition to the discussion. The exercise on "Comparative study of reference books," reprinted from the earlier edition of the manual, might have been improved by increasing the explicitness of evaluation required. The term, "best information," is ambiguous and prompts the query "best for what?"

The exercises on the use of periodical indexes in the eighth chapter are very useful, but improvement in format would allow more rapid scoring and objective evaluation. This suggestion applies also to a number of other exercises in the book and suggests the desirability of including in the manual a discussion of testing technique. Although the organization of the material in the manual would make such an addition difficult, it comes within the avowed scope of the book, and its inclusion as an additional chapter or an appendix would be justified.

Chapter ix, which was devoted to the building of personal libraries, has been widened in scope by the inclusion of a fourth objective—"to show them [students] how they may continue to use library facilities after leaving school." The problems on use of aids are either the same as in the earlier edition, or similar; but the introduction of one for the elementary school level is significant of the trend toward the earlier development of interest in, and evaluation of, books. The emphasis, however, seems to be too largely on format at the expense of content.

The usefulness of the chapter on "Compiling bibliographies" has been increased by the expansion of the directions for preparing lists. The suggestions are both more explicit and comprehensive than in the earlier edition, while the inclusion of examples should be of great assistance to students who attempt to prepare bibliographies. In the list of references the inclusion of an item such as Reeder's How to write a thesis suggests that this unit has value for advanced students as well as beginners.

Suggestions on notetaking form the concluding chapter of the book. As in the directions for bibliographies the points outlined are much more explicit and detailed than in the earlier edition. The method of reading the article as a whole before beginning to take notes has been discarded in favor of the paragraph comprehension procedure.

Appendix I, which outlined a plan for teaching the use of books and libraries, has been omitted in the new edition, probably because of the emphasis on integration of library instruction with the curriculum advocated in chapter i. Appendix II, a "Sample lesson on reference books for office practice classes," was not reprinted because it had been published elsewhere in revised form. The third Appendix, "Sample tests covering all units of library course," has been retained and includes a list of "Additional sources of library texts," which adds to the value of the section. This list indicates the growing interest in the more objective measurement of student competence to utilize library resources.

"The selected list of references on teaching the use of books and libraries" has been greatly expanded and divided into three sections: "General references," "References on illustrative material, games, plays, and other devices," and "Sources of illustrative material for library instruction." The

alphabetical arrangement of each section makes it easy to locate specific items, while careful and adequate indexing provides for quick utilization of the wealth of material embodied in the text of this useful and valuable teacher's manual.

LULU RUTH REED

Graduate Library School University of Chicago

Inexpensive books for boys and girls. 2d ed. Compiled by the BOOK EVALUATION COMMITTEE OF THE SECTION FOR LIBRARY WORK WITH CHILDREN OF THE AMERICAN LIBRARY ASSOCIATION. Chicago: American Library Association, 1938. Pp. 43. \$0.50; ten or more copies, \$0.40 each.

This is a book list. "Inexpensive" means regularly priced to the public at one dollar or less. "Boys and girls" means children from the picture-book age

through the eighth grade.

The Preface states that this compilation was made "in response to an expressed need from library workers in various parts of the country.... The list has been compiled for professional purposes, keeping in mind especially the smaller libraries whose book funds are often limited. It should also prove

useful as an aid in gift selection for the general public."

The list is in four parts: "Key to publishers' series"; "Picture books and easy reading"; "Junior books of general interest, grades 4-8"; "Analysis of publishers' series." The "Key to publishers' series" is alphabeted by the name of the series and gives publisher, price, and symbol used for the series in this list. The second and third parts are alphabeted by author, and give titles, publishers, and prices. The "Analysis of publishers' series" is a chart, arranged alphabetically by publisher and giving for each series, besides the publisher and price, format (appearance, appeal to children, print, paper, illustrations, margins, rebinding possibilities) and characteristics (selection of titles, edited or cut, other comments).

Thirty-eight series are listed in the "Key to publishers' series"; 266 titles in the "Picture books" section; 624 titles in the "Junior books" section; and twenty-eight series in the "Analysis of publishers series." Of these twenty-eight, five are English, the remainder, American. The Preface states that "the selection of titles covers a wide range of subjects asked for in children's departments. It is stronger in nonfiction and standard fiction. . . . . Comparatively few textbooks or supplementary readers are used. . . . . Many other useful books are excluded because they did not seem essential to a majority of committee members." Prices were checked where possible with the 1937 Publishers' trade list annual.

The planographed first edition of this pamphlet, issued in 1936, was exhausted, and the 1937-38 committee made this revision. "A number of titles have been added which were not available when the first edition was pub-

lished; others have been dropped which are now out of print or have increased in price beyond one dollar." The "Analysis of publishers' series" describes twenty-eight series, of which five were not included in the first edition. However, three series included in the first edition, have been omitted here. No descriptive comments, except price quotations, have been altered in the analytical chart. The arrangement of the two editions is very similar; slight differences in the second are an improvement. No member of the committee which compiled the first edition was on the committee making the revision. All five committee members are children's librarians in public libraries, and four of the five are from cities with a population of over 100,000.

Lest the purpose of the list be misinterpreted, the Preface warns that "the Book Evaluation Committee would deplore seeming to suggest book purchasing from the angle of price only, for an indiscriminate use of cheap editions and books would sacrifice both the quality and the attractiveness of the book collection. Discretion in the proportion of inexpensive books is therefore recommended."

The list is selective. The basis of selection is not clearly stated. Though the list does contain independent titles issued only in the one trade edition, perhaps it may be most wisely used to identify the inexpensive edition of a title already selected for purchase.

ESTHER STALLMANN

Graduate Library School University of Chicago

Catalogers' and classifiers' yearbook, No. 5. Compiled by the Catalog Section of the American Library Association. Chicago: American Library Association, 1936. Pp. 140. \$2.00.

The fifth number of this series opens with Florence M. Craig's survey of the Catalog Section *Yearbooks*, which includes a brief historical sketch of the previous issues, a discussion of sources of material for the publication, and which closes with an appeal for the writing of more material and the purchasing of more *Yearbooks*.

Following this is a group of three articles dealing with the organization of catalog departments—the department of the University of Illinois Library, the department of the Indianapolis Public Library, and the preparation division of the New York Public Library, which catalogs the books of the reference department. The discussions are, in reality, miniature manuals of procedure and are of interest in so far as they describe types of present practice.

In the "Symposium on the division of professional activities in the catalog department," by a group of leading catalogers from different types of libraries, there is practically a consensus of opinion that a division of work by

subject is preferable to one by process, and that a system in which catalogers do both the classification and the cataloging is generally superior to one in which these duties are separated. The great degree of specialization in the reference department of the New York Public Library has been given as the reason for combining classification with the assigning of subject headings and

divorcing the two activities from cataloging.

In the article, "Cataloging costs and a changing conception of cataloging," Andrew D. Osborn, of the New York Public Library, presents the view that the chief obstacle in the way of decreased cataloging costs "has been and remains the lack of an adequate theory of cataloging." By this is meant not the lack of technique, rules, or definitions that constitute a cataloging code, but the absence of underlying principles on which the code is based. It is obvious that catalogs must be evolutionary and that any code must recognize this fact, but it is felt that certain elements of permanence could be introduced which would decrease cataloging costs. The constant change of title and name is an example of a costly element of impermanence. Rigid techniques and routines have often been developed without sufficient reflection to answer the whys and wherefores. Too much standardization has resulted, and the same amount of time is frequently spent cataloging a trivial work as is spent cataloging an important contribution to knowledge.

A few concrete suggestions have been offered as to what can be done in this, the "Library of Congress card era," to reduce cataloging costs. Inquiry should be made to ascertain the best methods of securing Library of Congress cards, and more information should be made available as to what the Library of Congress is doing. It is suggested that a "Journal of cataloging" might serve these needs. For cataloging which must be done apart from Library of Congress work, various simplifying aids should be prepared and a system development.

oped so that all printed card resources can be utilized.

Much of the information in this article is not new, but because the underlying idea is vital, and because so little has been done toward the reduction of cataloging costs, it is particularly fitting to bring the matter to the attention

of the group who, perhaps, could do most about it.

Other contributions to this Yearbook are: the use of "Form cards," by Esther Anne Smith; a description of "Some recent cataloging activities," by Elizabeth H. Thompson; "What cataloging statistics do you keep?" by May Dornin; and a "Bibliography of cataloging and classification, 1934-35," compiled by Clarice E. Krieg. Additional features include: "Abstracts of theses presented to library schools in 1935 by students majoring in cataloging"; the "Constitution, Officers and Committees of the Catalog Section"; a "Directory of catalogers who are members of the A.L.A."; and an "Index to Yearbooks I-V, 1929-1935."

ELIZA ATKINS

Graduate Library School University of Chicago Subject headings in education. A systematic list for use in a dictionary catalog.

By CLYDE PETTUS. With a Preface by MARGARET MANN. New York:
H. W. Wilson, 1938. Pp. xvi+188. \$2.75 postpaid.

For the first time in the history of lists of subject headings we have a classified list showing by subordination the relationships of headings. Every heading is defined. Another departure is the listing of a book or periodical article to illustrate the type of material for which the heading is suggested. In preparing this list Miss Pettus has taken the whole field of education with its major divisions and considered each one with reference to whether or not the quantity of material published would warrant its use and its subdivision in a catalog. The plan was not to include every educational term but only those of sufficient importance to be necessary in a catalog. In a few groups, however, headings that would not ordinarily be used in cataloging are included to define the scope of the subject, e.g., "Statistical methods."

The headings are listed under forty-two groups, examples of which are: "Adult education," Child accounting," and "Tests and measurements." In some instances a group heading is a part of another group, but if left together, the group would be unwieldy and relationships could not be as clearly shown. An illustration of this is the group heading, "Psychology, educational," which is really a part of the larger group heading, "Psychology."

The "see also" references are used to connect headings that have relationships outside the group in which they are listed. It is suggested that the cataloger make the indicated "see also" references and connect in the same way all the subject headings within a group as they are used in the catalog. Group headings may refer to other related group headings, e.g., "Students (Group heading). See also Extra-curricular activities group: Guidance group." The "see" references are given in the right-hand column directly opposite the heading chosen for use.

Besides the subdivisions printed in the list, headings may be subdivided by means of: (1) the table of subdivisions which are to be used under school subjects, e.g., "Chemistry—Teachers' manuals"; (2) the name of a unit of school organization indicated by the symbol (S) following a heading, e.g., "Student employment—Universities and colleges"; and (3) the name of a place indicated by the symbol (G) following a heading, e.g., "Libraries, college—U.S."

Indention signifies a subdivision of the larger heading but does not mean that it is to be written as a subhead. "Form-board tests" is shown by its indention to be a division of "Performance tests," which are in turn a division of "Intelligence tests." The heading in the catalog would be simply "Form-board tests," but by the indention in the list its relation to both these terms is made plain. The explanation of this point in the Introduction does not seem very clear to the reviewer. An illustration of the character and appearance of the list follows:

Tests and Scales (S) (G)

"A general term used to designate the instruments used for measuring ability and achievement." E. A. Lincoln and L. L. Workman, Testing and the uses of test results. p. 300

(Include evaluation, reliability, and validity. Also use Tests and scales as a subdivision under school subjects)

Whipple, G. M. Manual of mental and physical

tests See also Objective examinations, 442; Teach-

ers-Rating, 1031.

Refer from (See ref.)

Norms: Rating scales: Scales and tests: Scores, Test: Standard tests: Standardized tests: Test scores; Testing programs.

The alphabetical index includes every term in the list regardless of whether it is used as a heading or suggested as a "see" reference. It would be a convenience to the user to have headings and "see" references differentiated by some such symbol as is used to show which headings in this list are also in the Library of Congress list.

Catalogers who use Miss Voegelein's List of educational subject headings. published in 1028 by the Ohio State University Press, will wonder in what respects Miss Pettus' list differs from it. As indicated above the Pettus list has three codes of subdivisions; the Voegelein list has six. A check of the terms beginning with the letter A in the Pettus list shows approximately 275. including "see" references and subheads; about 160 of these terms are found in Voegelein; and about 102 in the February, 1937, cumulation of the Education index.

A comparison of the terms on tests in the two lists shows that whereas Miss Voegelein has fifteen subdivisions to be used under the heading, "Tests," and seven headings beginning with the word, "Test," "Testing," or "Tests." Miss Pettus has a group heading, "Tests and measurements," including nine major divisions which have divisions and subdivisions. The Pettus list, as well as Voegelein and the Education index, uses the term: "Reading preferences" rather than the more common term, "Reading interests," which is indicated as a "see" reference. In common with the Education index the Pettus list gives "Honors work" with a "see" reference from "Honors courses," which is used as a heading by Voegelein.

It is to be hoped that this book will be the forerunner of a long list of special classified lists in those subject fields which have an extensive literature and a comprehensive vocabulary. Its definition of terms and citation of books to illustrate the headings is especially to be commended. It will be of value not only in special libraries on education but also in teachers college libraries and in library schools as an example of a classified special subject headings list. It would be desirable to give some education students an opportunity to use this list as an aid to their use of a dictionary catalog and to note their reactions.

University of North Carolina Chapel Hill, North Carolina

SUSAN GREY AKERS

Subject catalogue of the Library of the Royal Empire Society, formerly Royal Colonial Institute, Vol. IV, The Mediterranean colonies, the Middle East, Indian Empire, Burma, Ceylon, British Malaya, East Indian Islands, and the Far East. By Evans Lewin. London: Royal Empire Society, 1937. Pp. viii+812. £1 115.6d.

In his Preface to Volume I of this Subject catalogue, Mr. Lewin says that the Royal Empire Society Library is the "most important collection of general literature bearing upon the British Overseas Empire . . . . it now [1930] contains upwards of 200,000 books and pamphlets." No one examining his excellent catalog will dispute Mr. Lewin's statement.

A period of about five years elapsed between the appearance of Volumes III and IV. This was owing to building operations which necessitated storing the collection, so that much of the work could proceed only when the books could be found in other libraries. In many cases it was necessary to wait until the library's own material was again available. The work thus entailed can readily be understood by any librarian.

The explanations given in the Preface to Volume I greatly simplify the use of the Catalogue. Mr. Lewin calls the attention of students to the fact that while each section is in a sense a bibliography, it is not . . . . a complete bibliography, even of the publications in the library. . . . It is necessary . . . for the student to remember that all the literature dealing with a specific country will not necessarily be found under that country, but may sometimes be included in books of general rather than specific application. . . . To assist the student, however, references have been made, wherever desirable, from one subject to another of allied interest . . . . but it is quite impossible to make references, generally speaking, to every heading under which specific information may be found. It is precisely here that the intelligence of the reader must supersede such guidance as may be offered by a catalogue.

The present volume (Volume IV) includes the Mediterranean colonies, the Middle East, Indian Empire, Burma, Ceylon, British Malaya, East Indian Islands, and the Far East. "It embodies one notable section—the Cyprus collection, presented by the late Claude Delaval Cobham. . . . . The Indian section . . . . is neither as fine nor as extensive as the Canadian, Australasian, or African collections." Nevertheless India and Burma occupy four hundred pages of the Catalogue.

As in the previous volumes, the material is arranged by broad geographical divisions, as Europe, Syria and Lebanon, Persia, India, East Indian Islands, Japan. Some of these, especially India, have further geographical subdivision. Localities are subdivided by special subjects, e.g., Agriculture, Antiquities, Literature, Political questions, etc. In the case of India most of these subjects are grouped under the heading "India," instead of under each state. A reference under the state insures the finding of the material.

An Index of geographical entries locates places which do not have an entire section devoted to them. Author entries in the body of the *Catalogue* are abbreviated, usually only initials appear. An author Index, however, supplies as full names as could be found, with dates when possible, and other information

which helps to identify the author. The presence of a great many Indian names in this volume will make it especially useful to catalogers. The Preface

explains the principles followed in these entries.

It is hoped to complete the *Catalogue* with a smaller fifth volume, which will contain the "Biographical section, and . . . . Publications on the Great War. It . . . . may also embody additions made to the Library since the previous volumes were published."

In this Catalogue of an unusual collection we have a fine reference tool, excellently prepared. Scholars and librarians will want to join Mr. Lewin in thanking the Carnegie United Kingdom Trust and the Carnegie Corporation of New York, whose financial aid has made the work possible.

ESTHER A. SMITH

University of Michigan Ann Arbor, Mich.

Publicity primer. An abc of "telling all" about the public library. By Marie D. Loizeaux. New York: H. W. Wilson, 1937. Pp. 69. \$0.60.

In this small book there is sound, stimulating, and up-to-date advice on how to plan library publicity and what methods to use. Miss Loizeaux's purpose was not to write a comprehensive work on principles and practices—such works are listed in her Preface and Bibliography—but merely to set forth certain personal convictions she holds with respect to library publicity and to indicate a few of the ways in which theory and practice have worked out in her own experience. Because of this her book will prove most useful in

the small and medium-size public library.

Miss Loizeaux is a competent, practical librarian-publicist. Her ideas are based on tested experience and are therefore always convincing. She devotes a good share of her book to publicity methods, as the following chapter headings show: "Getting into print," "Window displays," "Posters," "Book exhibits," "Operas and symphonies," "Lectures and discussions." Some of the method chapters are packed with hunches and ideas, equally informative for the veteran as for the tyro, while others, such as the chapters on the "Radio" and "Budget tactics," treat the "how-to-do-it" angle of publicity in its broadest outlines only. Some of the newer and most exciting developments in publicity techniques are not mentioned at all; for example, Rudolph Modley's pictographs for interpreting statistics, "Camera King" which is revolutionizing older methods of presenting ideas, and movie film. These newer methods are not generally used by librarians, but Miss Loizeaux is too well informed and wide-awake to miss their significance. She could have done a useful bit of pioneering here in focusing attention on these new techniques and in showing their application to libraries.

The preliminary chapters on planning the program are, in the reviewer's

opinion, the best. Here she states the undebatable fact that library publicity is inevitable. Here she points out the first important step in the library's program of publicity—the community survey—and suggests a practical procedure to follow. This is a step which seems so obvious and vet which, nine times out of ten, is overlooked or passed up as unimportant by librarians. "Too much publicity," writes Miss Loizeaux, "is tossed about as leaves in the wind instead of being made into folded darts that will speed toward definite goals." Lacking a clear understanding of the organization of the community and lacking personal contacts which will give an intelligent knowledge of the interests of those to be served, the library cannot hope to carry out a workable publicity program. Equally important is the question of staff participation in the publicity program. Miss Loizeaux devotes one of her brief chapters to it but she might have been more emphatic. Without a doubt, the greatest single publicity asset any library has is an intelligent and informed staff. Library publicity presupposes an aptitude for interpreting books and the services of the library to the public. This can only be done by those who work with readers-both in and outside the library.

readers—both in and outside the library.

If, as the author implies and the reviewer vigorously affirms, the staff is the greatest single publicity asset a library has, then it follows that the most important publicity task of the librarian is not to prepare news releases or publicity reports but rather to bend all energies toward building up and inspiring the staff with confidence and enthusiasm for carrying out the functions of the library to the limit of its resources. The writer recalls at one time taking a group of despairing library school students at mid-term to visit the Evanston Public Library. They came away greatly inspired. They were more than impressed by the thoroughly alive, friendly, intelligent, and smooth-running teamwork of the staff. Such conditions are the substance of publicity. They are the conditio sine qua non of publicity. Under no other circumstances could a book like the Publicity primer be written. Miss Loizeaux is undoubtedly a competent publicist, but she is one because she works with a well-organized and enthusiastic staff. One shouldn't make the mistake of thinking one has learned this trick of publicity merely by reading her book. It is valuable as an inventory of method and practice, but it graduates beyond elementary procedure. It asserts, more often indirectly than directly, the basic conditions which make library publicity essential and inevitable.

There are a few factual and typographical errors in its pages; sometimes a simple direction to where certain things might be obtained would be helpful, but such corrections and omissions are not important. This is a good book, worth double the price the publishers are asking for it. And, incidentally, the Wilson Company deserves a word of commendation for an appropriate and

distinguished job of printing.

GUY R. LYLE

Woman's College of the University of North Carolina Shakespeare's Hamlet; the Second Quarto, 1604. Reproduced in facsimile from the copy in the Huntington Library. With an Introduction by Oscar Campbell. San Marino: Huntington Library, 1938. Pp. 16, [101]. \$2.50.

The reproduction of the first good edition of Shakespeare's most famous play is a companion volume to the excellent facsimile of the pirated First Quarto of Hamlet of 1603, which the Huntington Library published in 1931. The facsimiles of both quartos are offered together at the special price of \$5.00. It is a collotype reproduction of the trimmed and mounted Kemble-Devonshire copy, which was photolithographed by William Griggs in 1880. The Griggs facsimile has been widely circulated and has been used in the preparation of many editions of the play. Like so many facsimiles of the period, however, this was touched up in the process of preparation and, as Professor T. M. Parrott has pointed out, a number of differences between it and the original occur in the text. Although there is no evidence of systematic faking of headlines in the Griggs facsimile of this quarto—as there was in that of the First Quarto—great liberties were taken in touching up trimmed letters in the headlines, especially in the later pages.

The text of the Second Quarto of Hamlet is now made easily available by this exact collotype reproduction. Professor Campbell has provided the vol-

ume with a short and very readable Introduction.

EDWIN ELIOTT WILLOUGHBY

Folger Shakespeare Library Washington, D.C.

Shakespeare biography. And other papers chiefly Elizabethan. By Felix E. Schelling. Philadelphia: University of Pennsylvania Press, 1937. Pp. x+143. \$1.50.

In this attractive volume Professor Schelling has gathered together ten essays and addresses written in his usual delightfully urbane manner. Four of these papers concern Shakespeare. The title address (delivered at the Folger Shakespeare Library on Shakespeare's birthday, 1936) is a shrewd evaluation of the biographies of the past and a sketch of an ideal life of the poet. In "A negative of Shakespeare" Professor Schelling lists a rather astounding number of things that Shakespeare is not—themes and subjects common in his own day which he did not touch. The increasing assurance which both the biographical and textual study of Shakespeare has given us is discussed in "A return to Shakespearean orthodoxy," and "the amazing applicability of the Shakespearean reading of life to our life today" is analyzed in "Shakespeare, our contemporary."

The England of Shakespeare, its life and thought, is surveyed in "The land

<sup>1</sup> Library quarterly, II (1932), 89-90.

<sup>&</sup>lt;sup>2</sup> Modern language notes, LIX (1934), 376-79.

that the Puritans left behind them," and a great Shakespearean scholar and his library are pictured in the "Memorial to Horace Howard Furness" and "Shakespeare books in the library of the Furness Memorial." Another of his friends and fellow Philadelphians is charmingly described by Professor Schelling in "S. Weir Mitchell, poet and novelist," an address delivered on the hundredth anniversary of Dr. Mitchell's birth.

"The study of literature" is an acute criticism of present-day graduate study in the humanities. "You cannot keep the scholar from his book," Professor Schelling concludes, "nor can we ever hope to make a scholar by subsidy and direction."

Finally, in "Walls of brass: a fancy and parallel" Professor Schelling uses the story of Doctor Faustus and of Friar Bacon and Friar Bungay to draw a contrast between the Machiavellian hero of the past and the dictators of the present "masquerading in the stolen regalia of the Caesars and the pomp of the heroes of the Walhalla of Wagnerian opera."

EDWIN ELIOTT WILLOUGHBY

Folger Shakespeare Library

A bibliography of Edwin Arlington Robinson. By Charles Beecher Hogan. New Haven: Yale University Press, 1936. Pp. xiii+221. \$7.50.

A glance at this remarkable volume will reveal that this is, unquestionably, the most accurate and most complete bibliography of E. A. Robinson yet published. All other books on Robinson pale into insignificance beside this monument of rightly directed and brilliantly executed scholarship.

There are six parts to the book: "Works separately published," "Books and pamphlets originally publishing work by Robinson," "Work originally published in periodicals and newspapers," "Biographical and critical material dealing with Robinson," "Writings hitherto uncollected," "Miscellanies." There are also two helpful tools included, a General Index and an Index of Poems.

In the first section there is a complete and detailed collation and description of every one of Robinson's volumes. The rare-book-dealer and collector will find this part of the book extremely helpful, and libraries may use it as a check list for acquisitions and cataloging.

Part IV, material dealing with Robinson, is extremely valuable for all students of the poet. Here is the largest and most comprehensive gathering and listing of articles and books written about the poet to be found anywhere, and the splendid "reviews of individual books" section is a masterpiece of inclusiveness. The author has here covered a wide range of periodicals, including many daily, weekly, and monthly papers. For a full view of the contemporary reception of any volume written by Robinson, this is the place to go.

The twenty pages of hitherto uncollected writings of Robinson make this book, of itself, a collector's item. Five poems and a number of prose pieces are included.

Rounding out the volume are a complete Index to the book's contents and a list "designed to trace all of Robinson's known poems through their various appearances in periodicals and books." These make the bibliography really useful for quick and ready reference.

Two reviews, however, are lacking: a review of *The children of the night* found in the *Christian register* (Boston), LXXVI (December 23, 1897), 822-23, and a review of Lloyd Morris' *The poetry of Edwin Arlington Robinson* found in the *Bookman* (London), LXIV (May, 1923), 106, by T. Moult. One notes, too, that in Part IV the author does not give the pagination for books wholly concerned with Robinson; such might have been useful.

But, apart from these minor considerations, one feels that this is a superb book, invaluable to workers in the field of American literature.

THEODORE G. EHRSAM

Graduate School
New York University

Columbia University Library, A catalogue of the Epstean Collection on the history and science of photography and its applications especially to the graphic arts. New York: Columbia University Press, 1937. Pp. [110]. \$1.50.

This listing of a special collection in the Columbia University Library is interesting from a historical viewpoint. An indication of the type of literature contained in the collection is perhaps best indicated by the fact that it has been placed in the rare book department rather than in the working literature of the physical sciences. It is further necessary to note, when examining the 1,418 items that are listed, that the publication is a catalog of a specific

collection and not a bibliography.

The nature and quantity of the items included clearly show that Mr. Epstean, the donor, commenced the garnering of photographic literature in the very early days of the new art. The sections of the most interest and among the first in importance are those dealing with the history and evolution of photography. Many of the titles are quite rare today in any collection, either public or private. For example, from the section dealing with the invention of photography two titles might be mentioned: the rather well-known work by Fouque, La vérité sur l'invention de la photographie, 1867, and a very interesting item by Niépce, the son of Nicéphore Niépce who is commonly credited for an important part in the discovery of photography, entitled Historique de la découverte improprement nommée daguerreotype; précédé d'une notice sur son véritable inventeur, feu M. Joseph-Nicéphore Niépce ... 1841.

Other titles that are important to the student of the history of illustration and printing of books are grouped under photomechanical reproduction.

Items in this section go back as far as 1863.

The classification is alphabetical and chronological under various general divisions of the field which are then subdivided. In some respects the classification is constructed to fit the collection, and certain fields are included for which there are titles but which have subject fields of their own, quite distinct from photography. For example, spectroscopy with seventy-three items is listed in the section dealing with theoretical foundations. Admittedly, spectroscopy cannot be studied in most of its phases without the aid of photography, but many of the listed items have no apparent connection with photography per se, nor do they make up a special collection representative of spectroscopy. The same might be said of optics, though there, perhaps, the relation is closer.

It is difficult to analyze the completeness of the collection because of the lack of bibliographies in photography, and judging is made more difficult because no evaluating or abstracting is done. However, the collection seems most complete in the historical fields and rather incomplete in modern applications in specialized fields. Of noteworthy importance is the fact that before the donation was made the important library of Dr. Josef Maria Eder of Vienna was incorporated into the collection. Of an unusual nature in a book of this type is the physical format, which is enhanced by numerous caricatures and humorous drawings from early photographic texts.

HERMAN H. FUSSLER

University of Chicago Libraries

The changing American newspaper. By HERBERT BRUCKER. New York: Columbia University Press, 1937. Pp. x+111. \$1.50.

Lest the title of this work by the assistant to the dean of the Graduate School of Journalism at Columbia University be misleading, it should immediately be observed that the author does not attempt to discuss and explain the changing nature of the press in its larger sociological aspects. He does not undertake, for instance, to interpret the role played by the press in the 1936 presidential campaign, nor does he deal with the importance or the effects of tabloid journalism.

Instead of addressing the readers who might be presumed to be interested in a work dealing with such topics, the author has written his criticisms of present newspaper practices, his suggestions for improvement, and his predictions regarding the newspaper of tomorrow for professional newspapermen, instructors and students of journalism, and for whatever further audience there may be. In this last group librarians can well be included. They should be interested if for no other reason than that the newspaper envisaged by

Mr. Brucker will need and use constantly a much larger and better-trained research staff than is now customory even on metropolitan dailies. If this development occurs, library schools and placement agencies may have another customer.

Mr. Brucker finds that even the best newspapers today are failing to do their job well. He argues that news is now so complex that background material and interpretation are indispensable. The modern front page with its curious juxtaposition of unrelated stories is neither logical nor attractive to the reader. It produces and encourages the "headline-habit." The method of writing the gist of the entire story into the first sentence and developing its parts in subsequent paragraphs results in wearisome repetition and confusion. Printing several dispatches on the same topic, instead of re-writing them into a compact story, wastes the reader's time and fails to leave him with a unified impression.

Mr. Brucker's newspaper of the future, therefore, would make the first page a summary of all important news; the entire newspaper would be departmentalized; a more convenient size and more attractive typography would be used; the rules for headlines would be less rigid; the stories would be written in nonrepetitious style. To this end, re-write men would be instructed to "make a picture," as in the newsweeklies, rather than to crowd all the

significant facts into the first sentence.

The practical difficulties involved in such changes are considerable, but are not regarded as insurmountable. Several small dailies are already presenting the news in departmentalized form. Mr. Brucker has produced an experimental newspaper exemplifying his ideas. Photographic reproductions of standard newspapers, of the experimental paper, and of the departmentalized papers are included. There is no Index.

Mr. Brucker's arguments for condensation, organization, and explanation of the news are sound. One may hope that they will produce tangible results.

STEPHEN A. McCarthy

University of Nebraska Library

The general magazine and historical chronicle for all the British plantations in America, published by Benjamin Franklin. Reproduced from the original edition Philadelphia, 1741 with bibliographical note by Lyon N. RICHARDSON. ("Publication," No. 41 of the Facsimile Text Society.) New York: Columbia University Press, 1938. Pp. [xiii]+426. \$3.00.

Early American magazines were few, surviving copies or sets are "rare books," and files are seldom complete. The general magazine may be considered the first magazine to be planned in the British-American colonies, and the second actually to appear. The rivalry of the two Philadelphia printers, Andrew Bradford and Benjamin Franklin, to produce the first periodical of

this kind, is a well-known story, as is the fact that neither Bradford's American magazine nor Franklin's General Magazine lasted more than six months. Franklin's, although it missed the priority by only a few days, is probably the more significant effort, not only because of the fame of the editor and publisher, but because Bradford was a less able editor.

There is no known perfect and complete file of the General magazine, although the New York Public Library and Yale have almost complete runs. Eight other American libraries have partial files or scattering issues. The present facsimile reprint has been based on the copy at the New York Public Library and supplemented by that at New Haven. Bibliographical variants exist between issues of the publication, and these have been carefully noted and differentiated by the editor of the present reprint. Mr. Richardson's introductory note is both succinct and adequate—containing about all that is known, bibliographically speaking, concerning the General magazine.

As in the case of so many American colonial periodicals, much of the contents is reprinted from other sources—newspapers, pamphlets, and books which had already appeared. But this was what the people wanted at a time when the sources were not readily available. The nature of the contents indicates the preoccupations of the day—articles on the Anglo-Spanish war then going on, and on the progress thereof in relation to colonial commerce, verses about the popular heroes of the war, notes on commodity prices, rates on current bills of exchange, lists of exports from Philadelphia, etc. Beverley's Virginia was run serially, as was a manual of military exercises. The religious revival associated with the name of George Whitefield is reflected in the magazine. Creative literary contributions are almost wholly taken from other printed sources.

In this publication of the Facsimile Text Society, the printer, Edwards Brothers, of Ann Arbor, worked directly from a process negative made at the New York Public Library instead of from a photograph of the original from which a negative could be made. In this manner two photographic steps were eliminated in the reproduction by offset. The importance of this technique lies in the fact that in such reproduction every extra step in photography militates against the ultimate clearness of the text—and in this case, the tiny type used by Franklin made it necessary to use every possible device to secure as clear an image as possible. A complete set of Franklin's magazine, if procurable, would cost any library thousands of dollars—here it is available at a trifling cost.

RANDOLPH G. ADAMS

William L. Clements Library University of Michigan

## BOOK NOTES

The American book of days. A compendium of information about holidays, festivals, notable anniversaries and Christian and Jewish holy days, with notes on other American anniversaries worthy of remembrance. By George William Douglas. New York: H. W. Wilson, 1937. Pp. xxiv+666 \$3.75.

This usable and informative book, compiled by a former editor of one of America's largest metropolitan dailies, is based upon material gathered during thirty years of research and experience. As a reference tool such a compendium of miscellaneous data concerning American history and customs has value not only for editors but also for librarians, historians, writers, and teachers. Arranged according to calendar, the work contains an excellent and comprehensive Index. The history, origin, and characteristic observance of all American holidays, historical events, and religious feast and fast days are treated. Especially interesting are the side lights on American history and folk lore and the scholarship of the compiler is evident in the description of such festivals as the New Orleans Mardi Gras, to which he has devoted a good deal of space.

The book contains no bibliography, but one is inclined to agree with the compiler who says in his Preface, "... if I should give a list of the books I have consulted it

would savor too much of pedantry."

An annotated bibliography of Robert M. La Follette. The man and his work. By Ernest W. Sfirn. Chicago: University of Chicago Press, 1937. Pp. xi+571 (planographed). \$5.00.

This unusual book has as its objective the presentation of an inclusive bibliography of the life and times of the late Senator La Follette for the "use of students of history and politics.... for the convenience of librarians," and for the senator's admirers.

The entries are roughly chronological and are divided into seven parts. The references in all but two of the parts were taken from standard indexes: the Congressional record index for the two periods La Follette was a member of that body; the Index to the New York daily tribune, 1875-1906; the Readers guide and the International periodical index, 1900-36; and the Index to the New York times, 1913-36. The other sections include a few scattered items in the early period and "secondary source materials," the latter being mainly books (with evaluations) which refer to the man, or to Wisconsin government and politics.

This huge compilation should be wholly adequate for investigations of La Follette's public life and works. However, it gives few clues to material which might explain him

as a developing person.

British authors of the nineteenth century. Edited by Stanley J. Kunitz and Howard Haycraft. New York: H. W. Wilson, 1936. Pp. 677. \$5.00.

This volume takes its place, with others edited by Mr. Kunitz, on the biographical reference shelf of the well-equipped library. The scope of the book is, as its Preface indicates, "to provide in a single volume brief, readable accounts of the lives of the major and minor British authors of the nineteenth century concerning whom students and amateurs of English literature are likely at any time to desire information."

Here there are biographical treatments of some thousand authors, most of them writers of belles lettres, together with bibliographical material. This last is divided into

two parts, "Principal works," and "About." Publication dates of the first edition of

these works are also given.

It must be observed that a staff of more than a dozen writers has aided the editors in the compilation of this volume. Perhaps this fact accounts for the differences in style found in the various sections; perhaps, also, one may quarrel with important omissions in the "About" sections.

These observations notwithstanding, this is definitely a "must" book for the library

or for the student of nineteenth-century English literature.

Essay and general literature index 1937. An index to 2956 essays and articles in 150 volumes of collections of essays and miscellaneous works. Edited by Marian Shaw. New York: H. W. Wilson, 1937. Pp. vi+176. Sold on the service basis.

The latest annual supplement to the cumulated volumes covering 1900–33, and 1934–36 makes available a great deal of recent material that is otherwise buried in volumes of essays. Of the one hundred and fifty volumes analyzed, sixty-three were published in 1937, and eighty-one in 1936.

Friends of the library groups. Compiled by American Library Association. Chicago: American Library Association, 1937. Pp. 69 (mimeographed).

Friends of the library groups are fast spreading throughout the United States, as witness the admittedly incomplete lists of such societies given in this mimeographed pamphlet. In this new and enlarged edition of its 1936 predecessor, the American Library Association has collected "some of the various plans, forms, and other materials

used in organizing groups interested in befriending libraries."

A brief Introduction, based on actual examples, explains various purposes of such organizations and offers important suggestions for anyone attempting to form such a group. The remainder of the pamphlet consists of more or less detailed descriptions of the "Friends" associations in twenty-four American and four foreign libraries, giving information on the history of their founding, statements of aims and objectives, copies of constitutions and by-laws, etc. Numerous illustrations of enrolment forms, gift forms, and publications are included. A short final section contains two brief papers on memorial gifts.

List of Masonic subject headings for use in dictionary catalog Compiled by J. Hugo Tatsch and Muriel A. Davis. Boston: Library of the Grand Lodge Ancient Free and Accepted Masons of Massachusetts. Pp. [iii] +86 (mimeographed). \$2.00.

This list of Masonic subject headings has been compiled primarily for Masonic libraries and, in particular, for those having no trained librarian. No one not fully conversant with the subject of Freemasonry can judge the wisdom of the choice of terms, since the terminology is a very special one. Mr. Tatsch, however, is a recognized authority on the subject and he has had the technical assistance of a trained cataloger. It hardly seems that the user could ask for more. "See" and "see also" references are generously supplied, as well as "refer from" references. According to the Introduction, "The nomenclature follows that accepted in Massachusetts."

Accompanying the list of subject headings is A short list of books on Freemasonry available for the use of lodges and individual brethren from the Library of the Grand Lodge of Massachusetts A.F. & A.M. (Boston, 1935). This fourteen-page list includes the essential and fundamental books and should be very helpful to a student of the subject.

Our own book reviews: 102 children's books for 1937 ("Bulletin," No. 2; November, 1937.) New York: Association for Arts in Childhood, 1937. Pp. 23. \$0.20.

This list should prove useful to librarians and to teachers, not only because it is a significant selection of new books for children but also because it reflects the attitudes

of children themselves toward these books. School children on Long Island read the books and wrote the statements. These were then evaluated by adults so that the final selection of 102 books represent those acceptable according to both adult standards and children's opinions. Some of the annotations are a composite of the statements of several children, and a few were written by adults. The latter are marked by an asterisk. As a tool for book selection this represents another interesting approach to the problem of fitting the library collections to its clientele.

Practical bibliography making. With problems and examples. By Martha Conner; revised by Marton V. Higgins. New York: H. W. Wilson, 1938. Pp. 31 \$0.50, postpaid.

The revision of a useful handbook on bibliography making will be welcomed by all who have the responsibility for training students in library science. Here are found answers to many of the questions that puzzle the beginner in bibliographical techniques. The chief changes from the earlier edition are in arrangement rather than in content, though there are additional paragraphs and changes in recommended procedures. Could it have been managed without unduly extending the length of the pamphlet, a more lengthy discussion of the varieties of citation, particularly to magazine articles, would have been helpful to the student. The illustrative problems and exercises of the former edition have been retained in their original form.

A reader's guide to the British Library of Political and Economic Science. London: London School of Economics and Political Science (University of London), 1937. Pp. 113.

This guide to the library of the London School of Economics and Politics attempts to anticipate most of the questions of the undergraduate and many of the questions of the researcher who would use its facilities. It is much more than a rule book. The building is charted and labeled; the holdings are characterized; the contents of the open shelves in the various reading rooms are described; the cataloging system is outlined in detail; the catalogs and other finding devices are located and explained; the principal reference guides are listed and annotated; and detailed advice for finding the public documents of Great Britain and the United States is given. Librarians considering preparing a question-answerer for the users of their facilities might well consult this little volume.

## BOOKS RECEIVED

The following publications have been received at the offices of the Library quarterly:

- Actes du Comité international des Bibliothèques. 10<sup>me</sup> Session, Paris, 24-25 août 1937. (International Federation of Library Associations, "Publications," Vol. IX.) La Haye: Martinus Nijhoff, 1938. Pp. 182 + [4]. Fr. sw. 8.
- The Advisory Committee on Education, report of the committee, February 1938. Washington: U.S. Government Printing Office, 1938. Pp. xi + 243. \$0.35.
- Allgemeine Einleitung in die jüdische Literatur des Mittelalters. Von Moritz Steinschneider. Jerusalem: Bamberger & Wahrmann, 1938. Pp. 148 + [1]. \$2.50.
- Beiträge zur Sachkatalogisierung. Herausgegeben von SIGISMUND RUNGE. ("Sammlung bibliothekswissenschaftlicher Arbeiten" Heft 45 [II. Serie, Heft 28].) Leipzig: Otto Harrassowitz, 1937. Pp. vi+124. Rm. 8.
- Bibliographisches Handbuch über die theoretische und praktische Literatur für hebräische Sprachkunde. Von Moritz Steinschneider. Jerusalem: Bamberger & Wahrmann, 1937. Pp. xxxvi+160+132.
- Booklist books, 1937. Selected by the vote of many librarians and compiled by the STAFF OF THE BOOKLIST. Chicago: American Library Association, 1938. Pp. 61. \$0.75.
- Business profits and the use of published information. Sponsored by the Business Library Promotion Committee, Alma C. Mitchell, chairman. New York: Special Libraries Association, 1938. Pp. 16. \$0.50.
- The development of meaning vocabularies in reading. An experimental study.

  By WILLIAM S. GRAY and ELEANOR HOLMES. ("Publications of the Laboratory Schools of the University of Chicago," No. 6.) Chicago: University of Chicago, 1938. Pp. xii+140. \$1.50, postpaid.
- Dime novel bibliography 1860-1928. By Charles Bragin. Brooklyn: Charles Bragin, 1938. Pp. [iv]+29 (photo offset). \$1.00.
- Directories for the business man. Compiled by Laura A. Eales with the cooperation of the Publications Committee of the Special Libraries Association. New York: Special Libraries Association, 1938. \$1.00.
- The fifteenth century: the cradle of modern book illustration. Book illustration before Duerer, an exhibition and list. By Frank Weitenkampf. New York: New York Public Library, 1938. Pp. 19. \$0.25.

Jahresbericht der Preussischen Staatsbibliothek, 1936. Berlin: Walter de Gruy-

ter, 1937. Pp. 108.

Journal of documentary reproduction: a quarterly review of the applications of photography and allied techniques to library, museum and archival service, Vol. I, No. 1 (Winter, 1938). Chicago: American Library Association, 1938. Pp. 125. Annual subscription, \$3.00.

Jüdische Typographie und jüdischer Buchhandel. Von Moritz Steinschneider und David Cassel. Ierusalem: Bamberger & Wahrmann. 1928.

Pp. 74. \$2.50.

Library literature, 1937: an author and subject index-digest to current books, pamphlets and periodical literature relating to the library profession. Edited by Marian Shaw. New York: H. W. Wilson, 1938. Pp. xix+450. Sold on service basis.

The master plan with a discussion of the theory of community land planning legislation. By Edward M. Bassett. New York: Russell Sage Founda-

tion, 1938. Pp. 151. \$2.00.

Passenger lists of ships coming to North America: a bibliography. Compiled by A. Harold Lancour. New York: New York Public Library, 1938. Pp. 26. \$0.25.

The public assistance worker. His responsibility to the applicant, the community, and himself. Editor, Russell H. Kurtz. New York: Russell Sage Foundation, 1938. Pp. 224. \$1.00.

The public library—a people's university. By ALVIN JOHNSON. New York: American Association for Adult Education, 1938. Pp. ix+85. \$1.00.

Readers' guide to books on engineering. London: Library Association, County Libraries Section, 1937. Pp. 32.

Readers' guide to books on handicrafts. London: Library Association, County Libraries Section, 1937. Pp. [iv]+24.

Readers' guide to modern poetry. London: Library Association, County Libraries Section, 1937. Pp. [ii]+16.

Readers' guide to books on psychology. London: Library Association, County Libraries Section, 1937. Pp. 32.

Rochester Historical Society, Publications, Vol. XVI. Part I: The history of Rochester libraries, Blake McKelvey, ed.; Part II: Lewis H. Morgan's European journal, Leslie A. White, ed. Compiled under the supervision of Dexter Perkins, city historian, by authority of the Board of Trustees of the Rochester Public Library. Rochester: Published by the Historical Society, 1937. Pp. xiv+[ii]+416.

Sächsische Landesbibliothek zu Dresden. Erwerbungen 1936/1937. Auswahl mit Verfasser- und Schlagwortregister am Schluss. Dresden, 1937. Pp. [iv]+161.

